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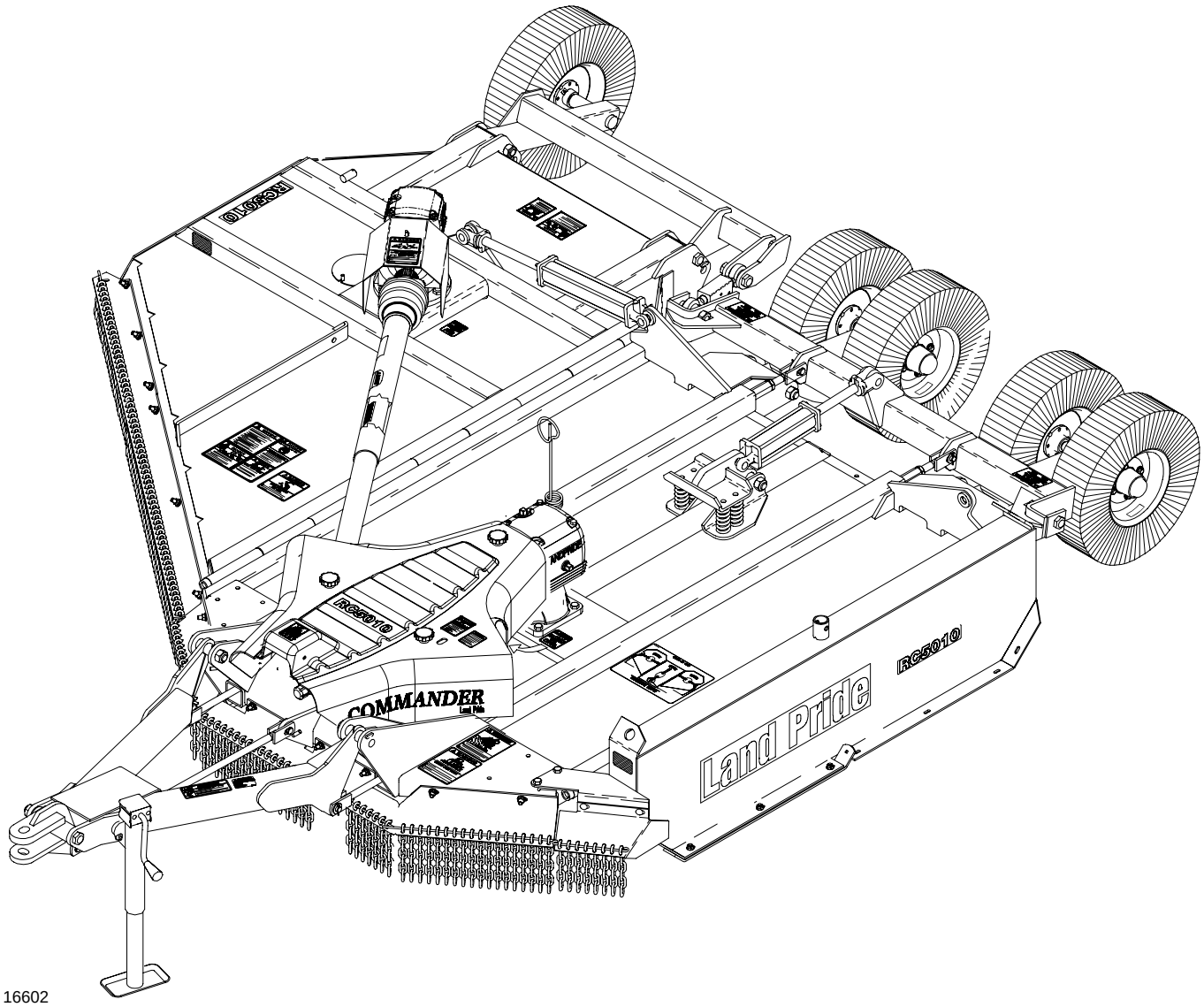
Rotary Cutters

RC5010 & RC6010 (540 RPM) and RCM5010 & RCM6010 (1000 RPM)



16602

318-128M
Operator's Manual

Read the Operator's manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

© Copyright 2008 Printed **8/28/08**

Cover photo may show optional equipment not supplied with standard unit.

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Printed in the United States of America.

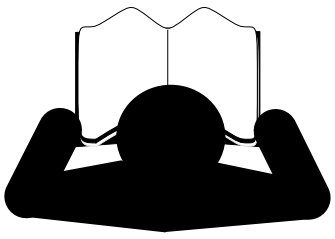
These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Label" section, read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

- ▲ Operator should be familiar with all functions of the unit.
- ▲ Operate implement from the driver's seat only.
- ▲ Make sure all guards and shields are in place and secured before operating the implement.Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor could cause serious injury or death.
- ▲ Do not allow anyone to stand between the tractor and implement while backing up to the implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Wear snug fitting clothing to avoid entanglement with moving parts.
- ▲ Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.
- ▲ Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.
- ▲ Do not carry passengers on implement at any time.



Look For The Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be Aware of Signal Words

A Signal word designates a degree or level of hazard seriousness. The signal words are:

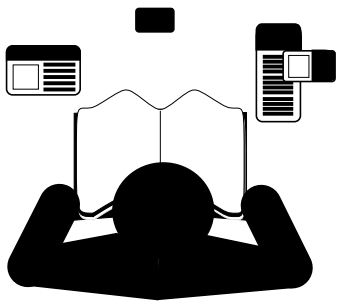
DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

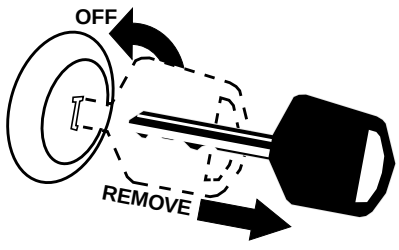
For Your Protection

- ▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



Shutdown and Storage

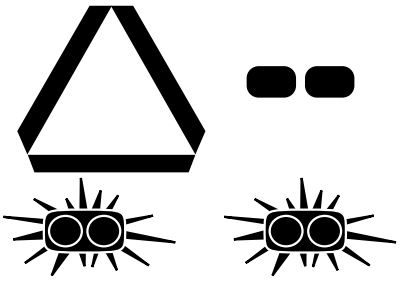
- ▲ Lower machine to ground, put tractor in park, turn off engine, and remove the key.
- ▲ Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.



These are common practices that may or may not be applicable to the products described in this manual.

Use Safety Lights and Devices

- ▲ Slow-moving tractors, self-propelled equipment and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with implement.



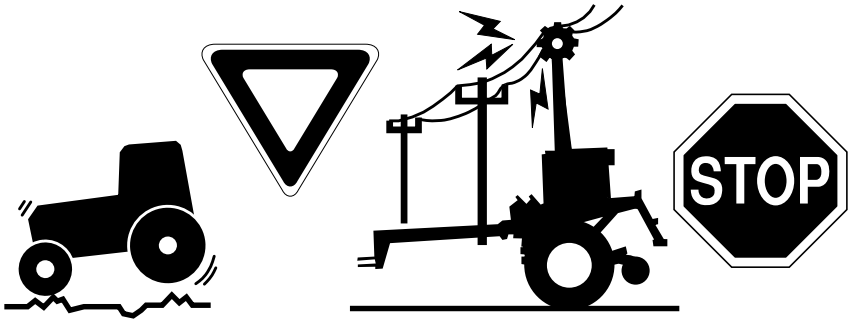
Transport Machinery Safely

- ▲ Comply with state and local laws.
- ▲ Maximum transport speed for implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
- ▲ Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.
- ▲ Use the following maximum speed - tow load weight ratios as a guideline:

  20 mph when weight is less than or equal to the weight of tractor.

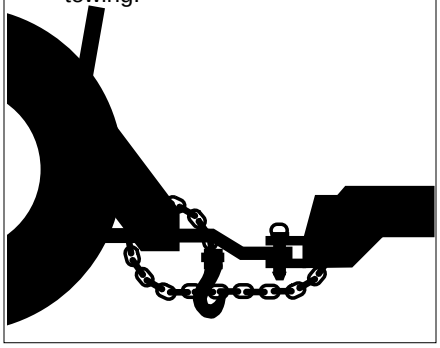
  10 mph when weight is double the weight of tractor.

IMPORTANT: Do not tow a load that is more than double the weight of tractor.



Use A Safety Chain

- ▲ A safety chain will help control drawn machinery should it separate from the tractor drawbar.
- ▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
- ▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- ▲ Do not use safety chain for towing.



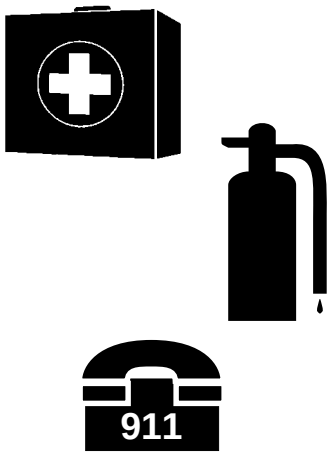
Practice Safe Maintenance

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Allow implement to cool completely.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make sure parts are in good condition & installed properly.
- ▲ Remove buildup of grease, oil or debris.
- ▲ Remove all tools and unused parts from implement before operation.

These are common practices that may or may not be applicable to the products described in this manual.

Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.



Wear Protective Equipment

- ▲ Wear protective clothing and equipment.
- ▲ Wear clothing and equipment appropriate for the job. Avoid loose-fitting clothing.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.

Avoid High Pressure Fluids Hazard

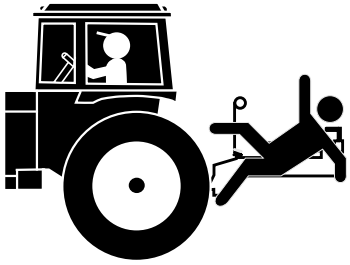
- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines or performing work on the system.
- ▲ Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be treated within a few hours or gangrene may result.

Tire Safety

- ▲ Tire changing can be dangerous and should be preformed by trained personnel using the correct tools and equipment.
- ▲ When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.

Keep Riders Off Machinery

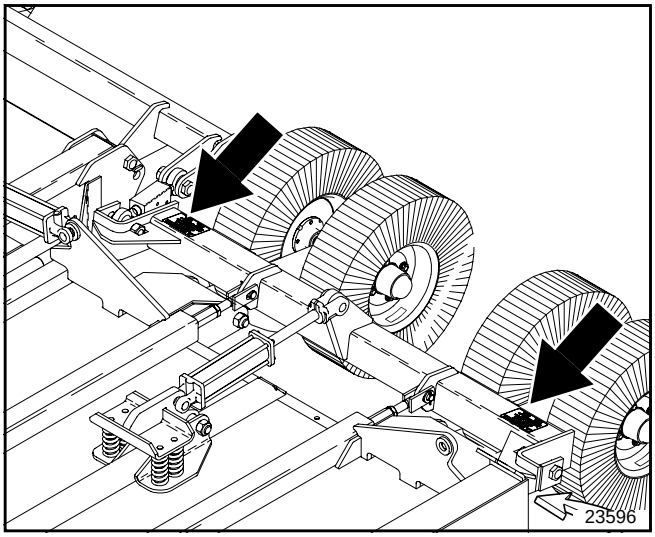
- ▲ Riders obstruct the operator's view, they could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.



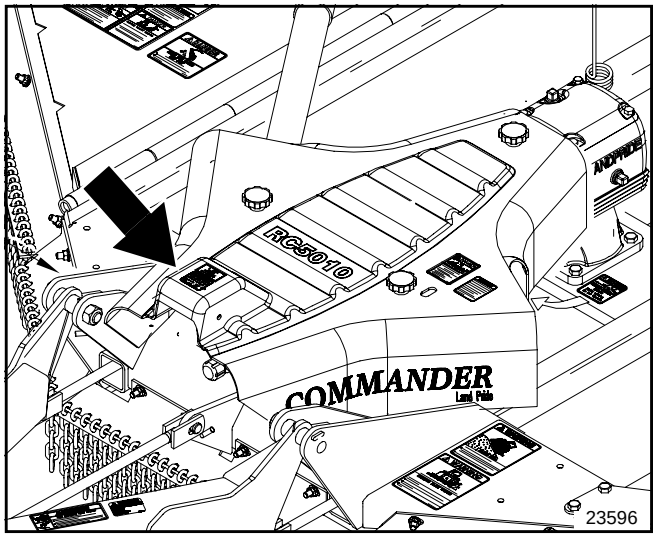
Safety Labels

Your cutter comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. *Keep all safety labels clean and legible.*
2. *Replace all damaged or missing labels. To order new labels go to your nearest Land Pride dealer.*
3. *Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.*
4. *Refer to this section for proper label placement. To install new labels:*
   a. *Clean the area the label is to be placed.*
   b. *Spray soapy water on the surface where the label is to be placed.*
   c. *Peel backing from label. Press firmly onto the surface.*
   d. *Squeeze out air bubbles with the edge of a credit card.*

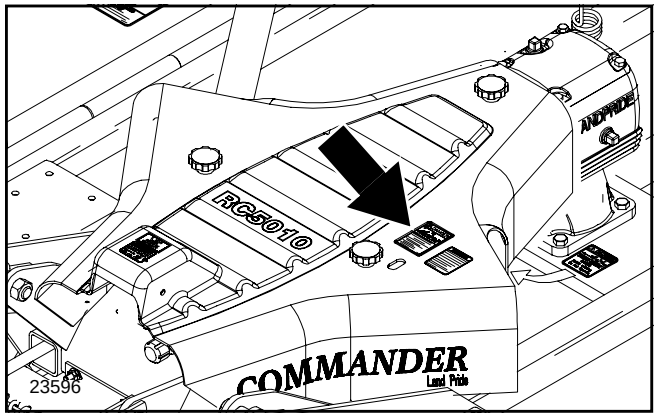


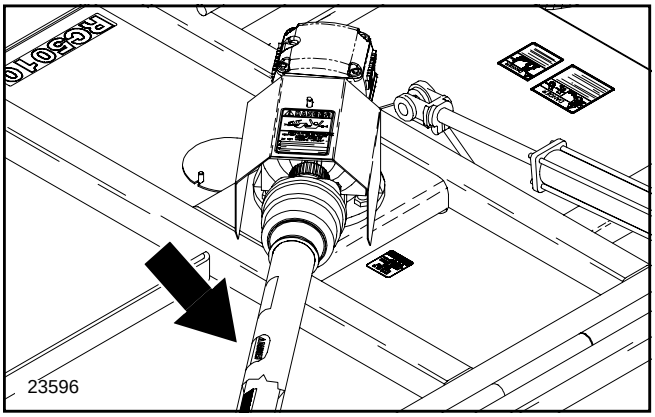
818-045C
Pinch Point Warning

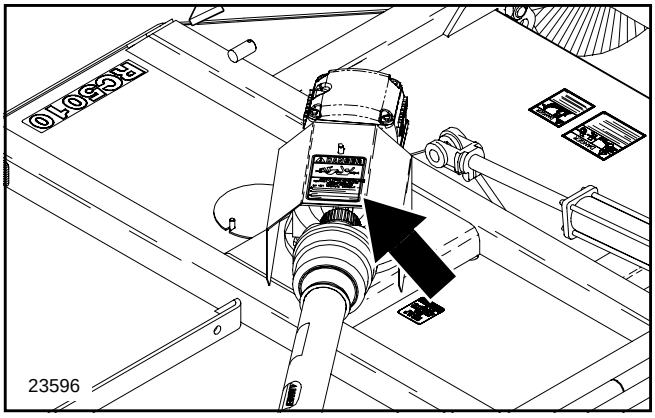


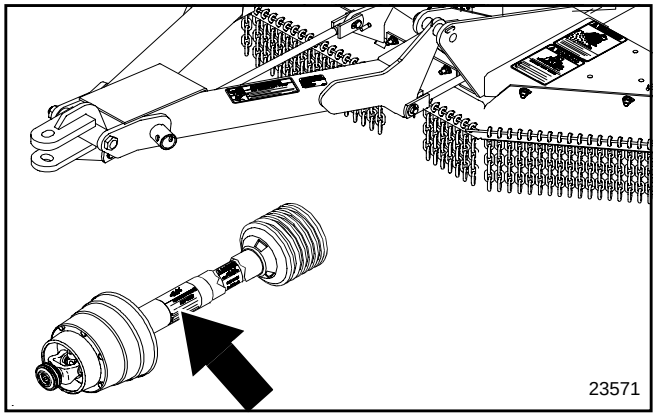
818-130C
Caution! Use 540 rpm PTO only

818-240C
Caution! Use 1000 rpm PTO only





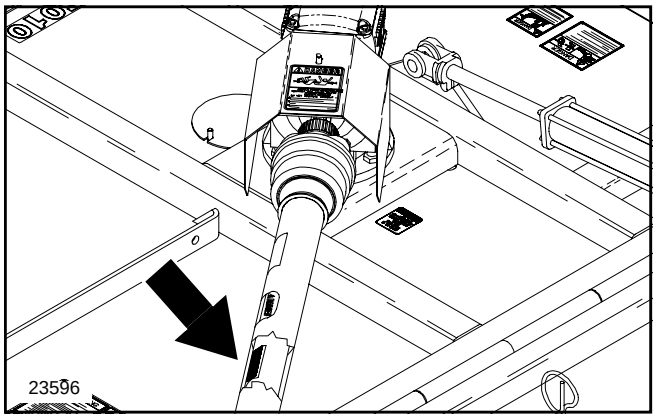


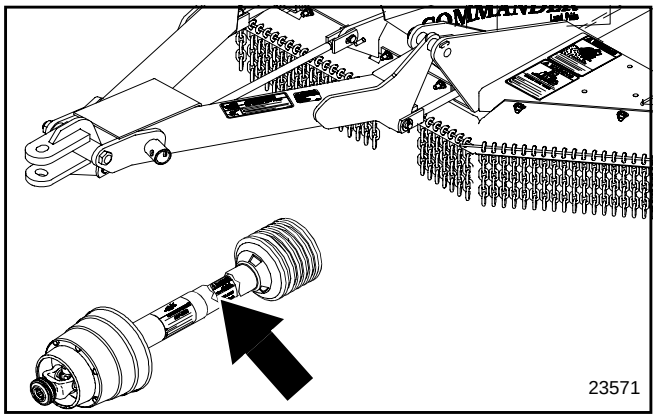


DANGER
ROTATING DRIVELINE
CONTACT CAN CAUSE DEATH
KEEP AWAY!
DO NOT OPERATE WITHOUT –
• All driveline guards, tractor and equipment shields in place
• Drivelines securely attached at both ends.
• Driveline guards that turn freely on Driveline
818–552C

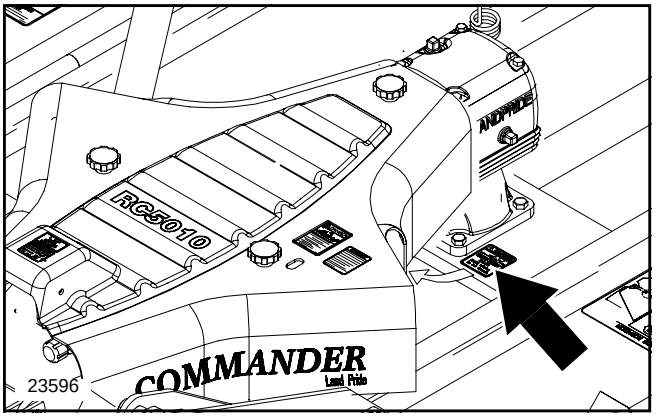
818-552C

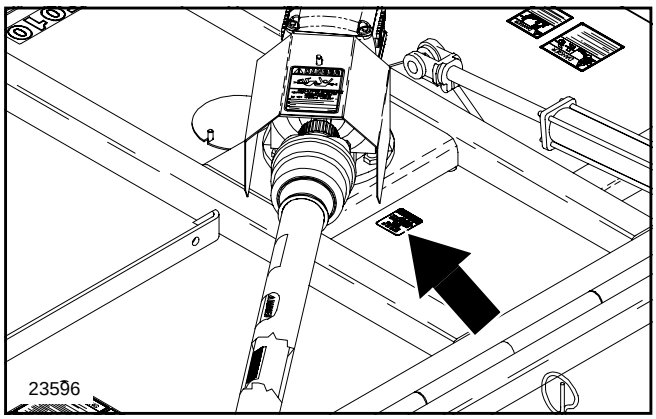
Danger! Rotating Driveline Entanglement Hazard





818-540C
Danger! Shield Missing -
DO NOT Operate

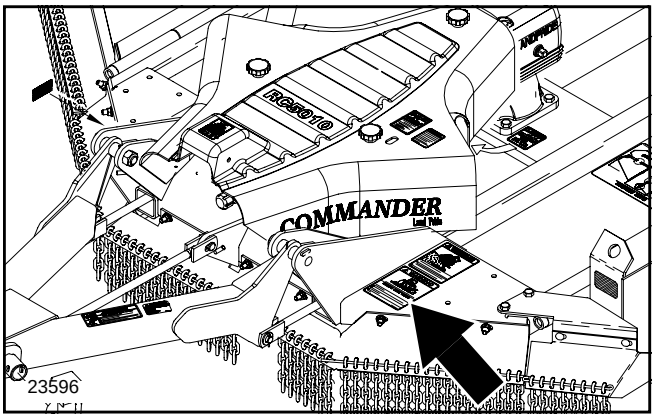


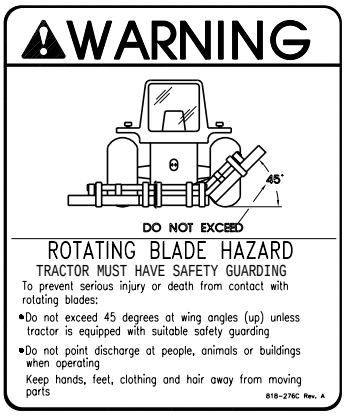


DANGER
GUARD MISSING
When this is visible
DO NOT OPERATE
ENTANGLEMENT HAZARD
can cause Serious Injury or Death
Si no entiende ingles, se prefiere que busque a alquien que interprete las instrucciones para usted.
PHDC 6

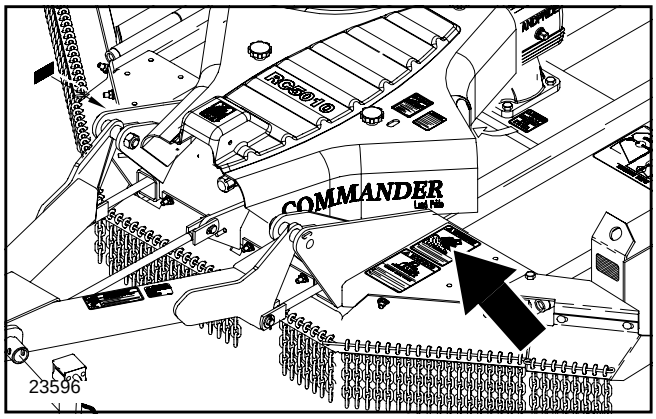
818-543C
Danger! Guard Missing
DO NOT Operate

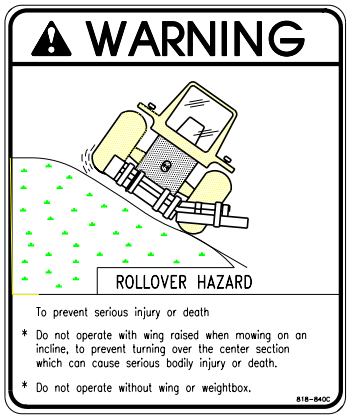
(Beneath Each Guard)



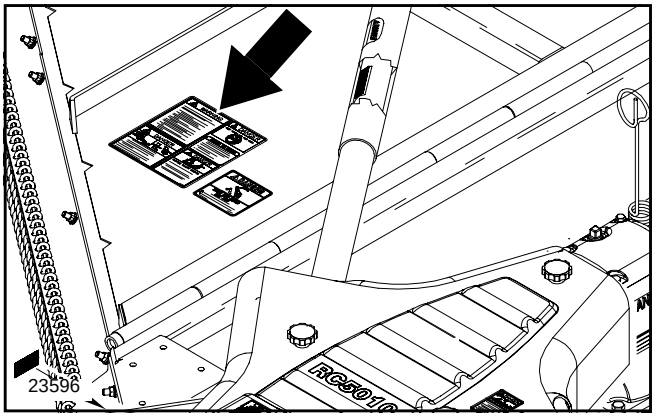

WARNING
45°
DO NOT EXCEED
ROTATING BLADE HAZARD
TRACTOR MUST HAVE SAFETY GUARDING
To prevent serious injury or death from contact with rotating blades:
•Do not exceed 45 degrees at wing angles (up) unless tractor is equipped with suitable safety guarding
•Do not point discharge at people, animals or buildings when operating
Keep hands, feet, clothing and hair away from moving parts
818-276C Rev. A

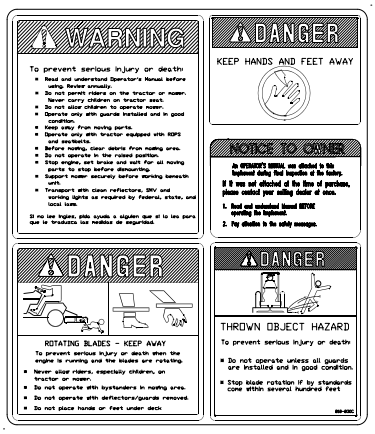
818-276C
Warning! Rotating Blade Hazard



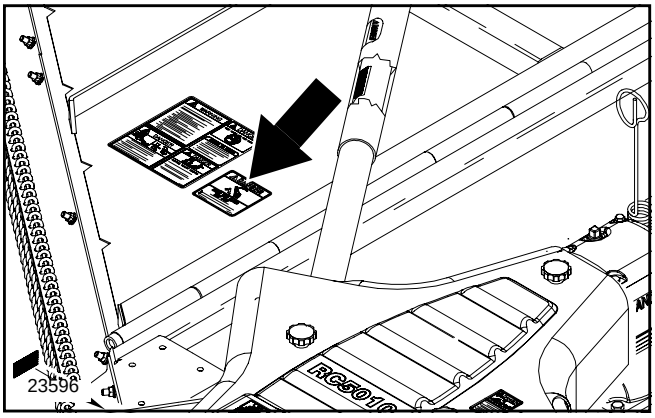

WARNING
ROLLOVER HAZARD
To prevent serious injury or death
* Do not operate with wing raised when mowing on an incline, to prevent turning over the center section which can cause serious bodily injury or death.
* Do not operate without wing or weightbox.
818-840C

818-840C
Danger: Rollover Hazard



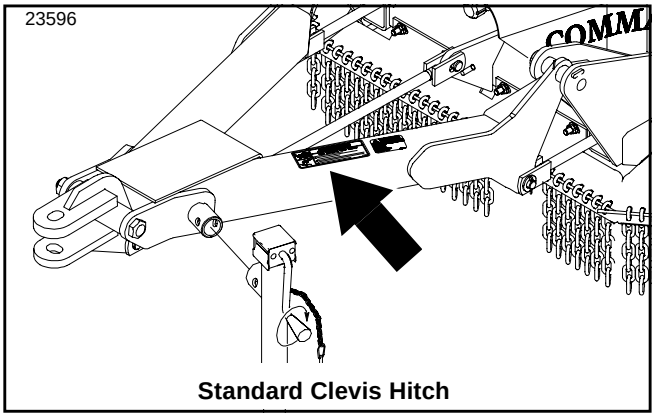


818-830C
Safety Combo

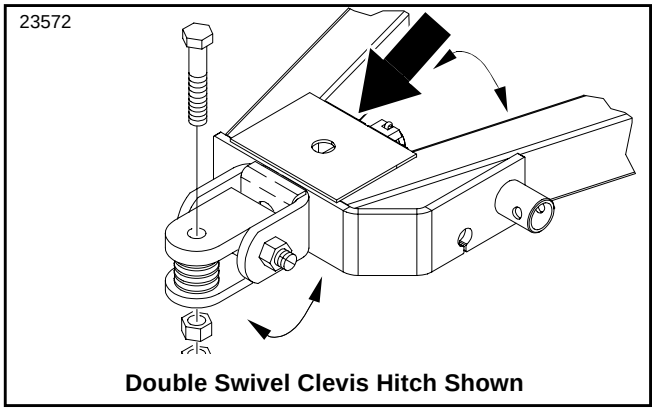


DANGER
RAISED WING HAZARD
KEEP AWAY
To prevent serious injury or death:
• Do not transport without transport locks securely engaged.
• Do not walk or work underneath raised wing unless it is securely locked.
818-561C

818-561C
Warning! Moving Parts Hazard



Standard Clevis Hitch



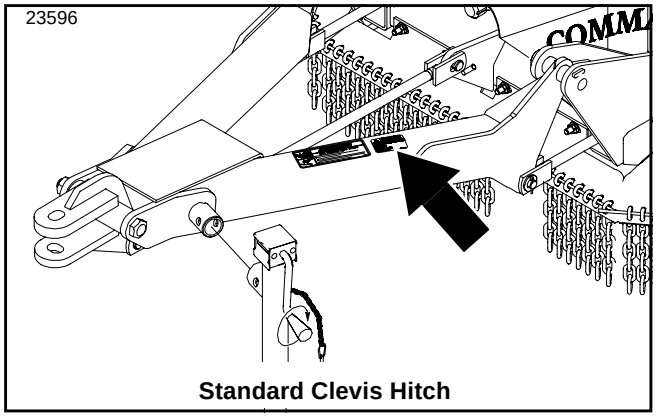
Double Swivel Clevis Hitch Shown

WARNING
HIGH PRESSURE FLUID HAZARD
To prevent serious injury or death:
• Relieve pressure on system before repairing or adjusting or disconnecting.
• Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
• Keep all components in good repair.
838-094C

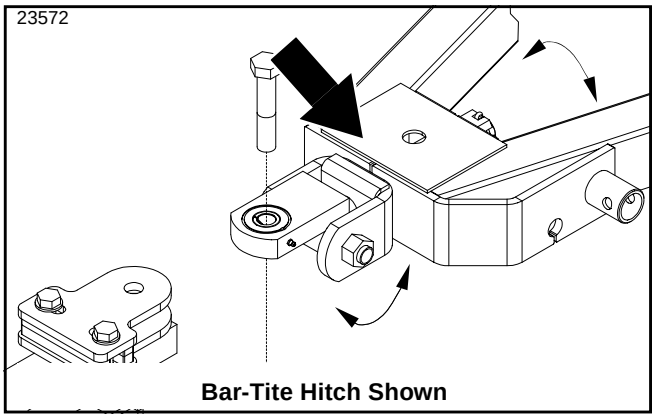
838-094C

Warning: High Pressure

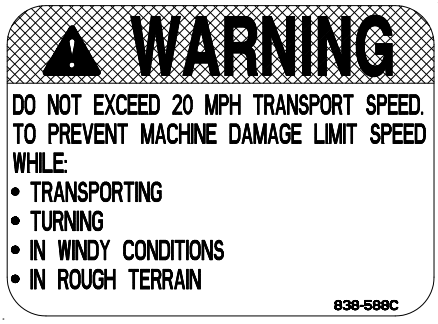
Located on
Standard Clevis Hitch arm,
Double Swivel Clevis Hitch
and Bar-Tite Hitch



Standard Clevis Hitch



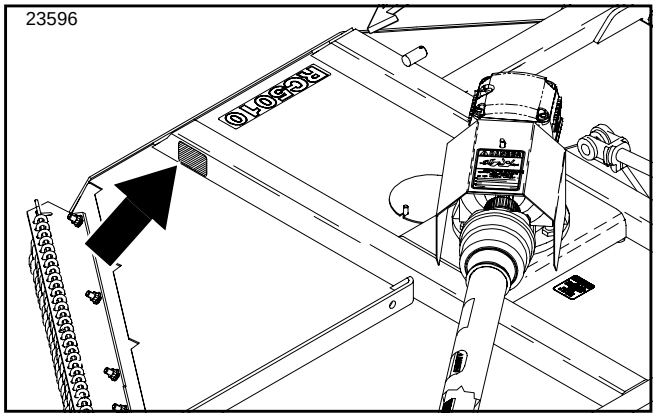
Bar-Tite Hitch Shown

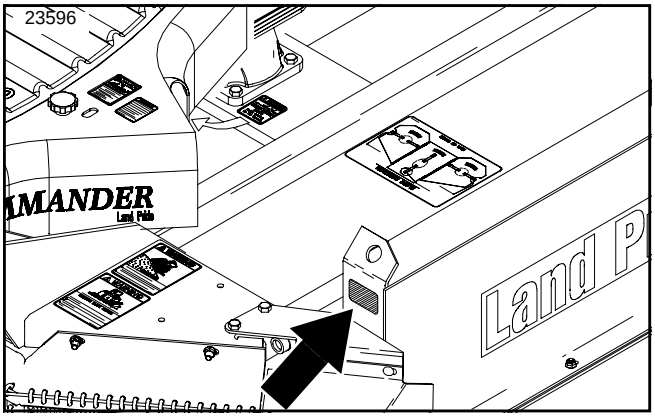


838-588C

Warning: Folding Cutter Speed Warning

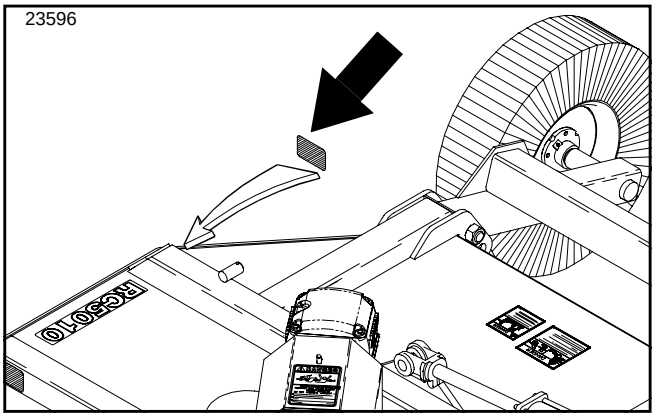
Located on
Standard Clevis Hitch arm,
Double Swivel Clevis Hitch
and Bar-Tite Hitch

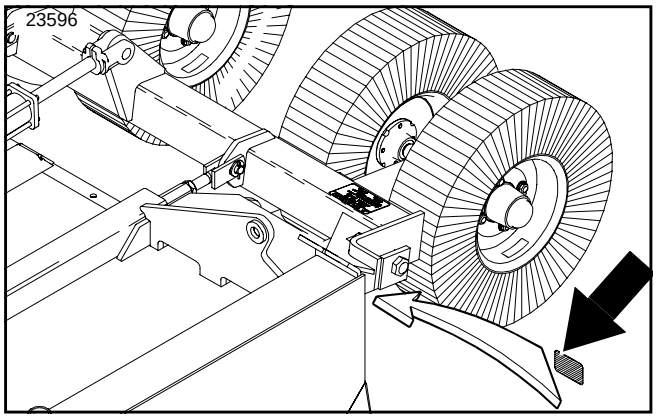




818-229C
Amber Reflector

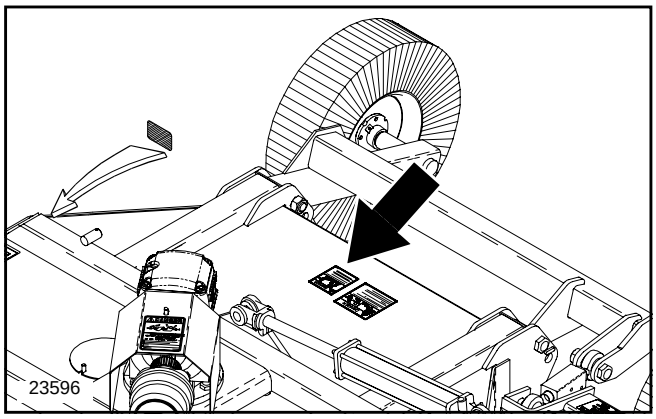
Located on Wing & Weight Box





818-230C
Red Reflector

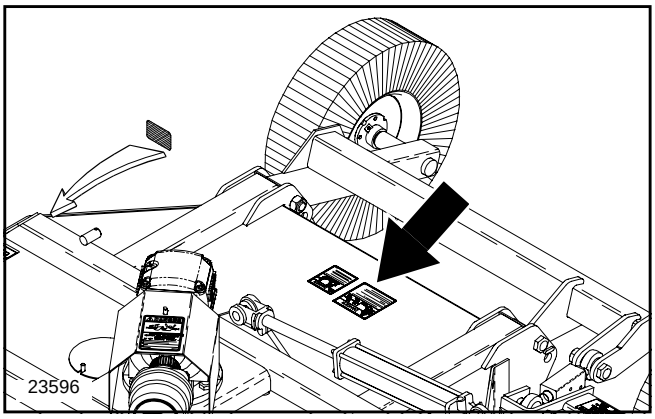
Located on Wing & Weight Box

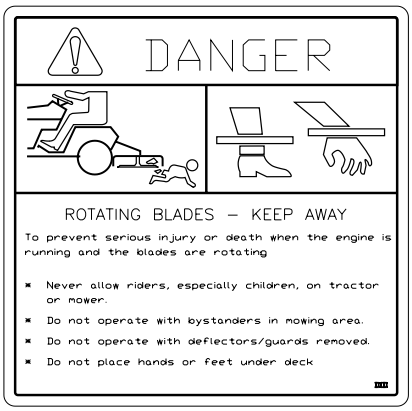


DANGER
THROWN OBJECT HAZARD
To prevent serious injury or death from thrown object:
• Operate only with all guards installed and in good condition.
• Stop operation if bystanders come within several hundred feet.
818-556C

818-556C
Danger! Thrown Object Hazard

Located on Left Wing & Right Wing




DANGER
ROTATING BLADES – KEEP AWAY
To prevent serious injury or death when the engine is running and the blades are rotating
Never allow riders, especially children, on tractor or mower.
Do not operate with bystanders in mowing area.
Do not operate with deflectors/guards removed.
Do not place hands or feet under deck

818-564C
Danger! Rotating Blade

Located on Left Wing & Right Wing

Land Pride welcomes you to the growing family of new product owners.

This implement has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this machine.

The parts on your Rotary Cutter have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your Rotary Cutter require replacement parts go to your Land Pride Dealer.

Application

The heavy duty RC5010, RCM5010, RC6010 and RCM6010 Series Rotary Cutters are designed and built by Land Pride to provide excellent cutting performance on gently sloping or slightly contoured right of ways, roadsides, pastures, set-aside-acres, or for residue in row crop fields. The 10 ft. cutting width, 2" to 14" cutting height and ability to cut weeds and brush make them well suited for these applications. All listed models offer pull-type self-leveling clevis hitches for attachment to 50-250 hp tractors. Both 50 & 60 series feature a Cat. 5 main driveline. Both models offer various safety guard selections making them an excellent choice for state and municipal mowing applications.

See "**Section 6: Specifications & Capacities**" on page 38 and "**Section 7: Features and Benefits**" on page 39 for additional information and performance enhancing options.

Using This Manual

- This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator's or Parts Manual contact your authorized dealer. Manuals can also be downloaded, free-of-charge from our website at www.landpride.com or printed from the Land Pride Service & Support Center by your dealer.

Terminology

"Right" or "Left" as used in this manual is determined by facing forward in the direction the machine will operate while in use unless otherwise stated.

Definitions

IMPORTANT: A special point of information related to its preceding topic. Land Pride's intention is that this information should be read and noted before continuing.

NOTE: A special point of information that the operator must be aware of before continuing.

Owner Assistance

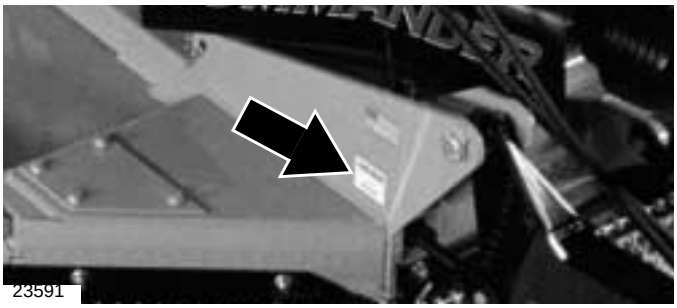
The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

If customer service or repair parts are required contact a Land Pride dealer. A dealer has trained personnel, repair parts and equipment needed to service the cutter.

The parts on your cutter have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your cutter require replacement parts go to your Land Pride Dealer.

Serial Number Plate

For prompt service always use the serial number and model number when ordering parts from your Land Pride dealer. Be sure to include your serial and model numbers in correspondence also. Refer to Figure 1 for the location of your serial number plate.



Serial Number Plate Location
Figure 1

Free Maintenance Video

Be sure to request your free copy of the **15' Rotary Cutter Maintenance Guidelines** (also applicable to 10', 14' & 20' cutters) video from your local Land Pride dealer.

Further Assistance

Your dealer wants you to be satisfied with your new cutter. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss the matter with your dealership service manager making sure he is aware of any problems you may have and that he has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060

E-mail address
lpservicedept@landpride.com

Tractor Requirements

Horsepower

The cutter is designed to be used on tractors with 50 to 250 hp.

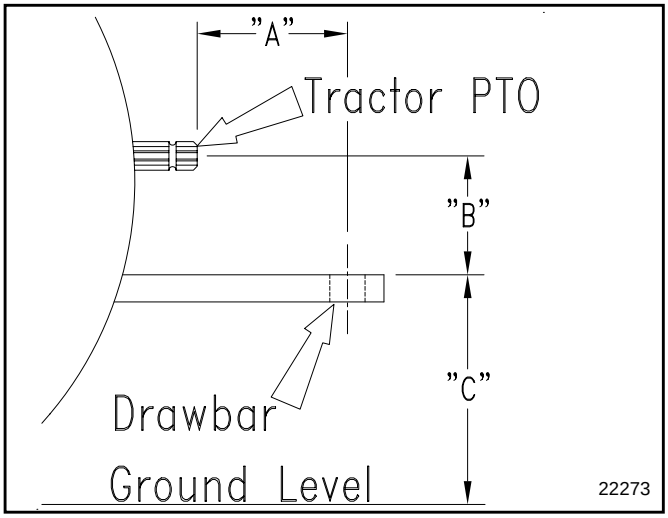
Hitch

Refer to Figure 1-1:

The cutter uses a drawbar type hitch hook-up. Maintain proper distance, dimension “A”, between center of drawbar hitch pin hole and end of tractor PTO shaft.

- “A” = 14" for 540 rpm
- “A” = 16" for 1000 rpm
- “C” = 18” to 21” for 540 rpm and 1000 rpm

IMPORTANT: PTO damage may occur if distance “A” is not properly maintained.



PTO to Drawbar Distance
Figure 1-1

Hydraulic Outlets

Two duplex outlets are required. One to raise and lower the cutter and one to raise and lower the wing.

Optional control valve kits are available from your local Land Pride dealer if the tractor is not properly equipped.

Land Pride Control Valve Kits

Part No.	Part Description
312-315A	3 SPOOL CONTROL VALVE KIT For use with single duplex outlet.
312-316A	SELECTOR CONTROL VALVE KIT For use with single duplex outlet.

PTO Speed

CAUTION!

Do not over speed the PTO. The cutter can be damaged when operated above its rated PTO RPM.

Rear PTO Speed:

Model RC5010 & RC6010 . . . . . 540 RPM

Model RCM5010 & RCM6010 . . . . . 1000 RPM

IMPORTANT: Do not attempt to operate a 540 RPM driveline with a 1,000 RPM PTO tractor or a 1,000 RPM driveline with a 540 RPM PTO tractor. Many tractors provide both 540 and 1,000 RPM PTO modes. Check your tractor’s manual to determine its capabilities.

Before You Start

Read and understand the operator’s manual for your cutter. An understanding of how it works will aid in the assembly and set-up of your cutter.

It is best to go through the **Pre-Assembly Checklist** before assembling the cutter. Speed up your assembly task and make the job safer by having all the needed parts and equipment readily at hand.

Torque Requirements

Refer to “Torque Values Chart” on page 42 to determine correct torque values when tightening hardware.

Pre-Assembly Checklist

	Check	Reference
☐	Have a fork lift or loader with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.	
☐	Have a minimum of two people available during assembly.	
☐	Make sure all major components and loose parts are shipped with the machine.	Operator’s Manual
☐	Double check to make sure all parts, fasteners and pins are installed in the correct location. Refer to the Parts Manual if unsure. By double checking, you will lessen the chance of using a bolt incorrectly that may be needed later. **NOTE:** All assembled hardware from the factory has been installed in the correct location. Remember location of a part or fastener if removed during assembly. Keep parts separated.	Operator’s Manual 330-323M Parts Manual 330-323P
☐	Make sure working parts move freely, bolts are tight & cotter pins are spread.	Operator’s Manual
☐	Make sure all grease fittings are in place and lubricated.	Page 32
☐	Make sure all safety labels are correctly located and legible. Replace if damaged.	Page 4
☐	Make sure all red and amber reflectors are correctly located and visible when machine is in transport position.	Page 9
☐	Make sure all tires are inflated to the specified psi air pressure and all wheel bolts and axle nuts are tightened to the specified torque.	Page 42

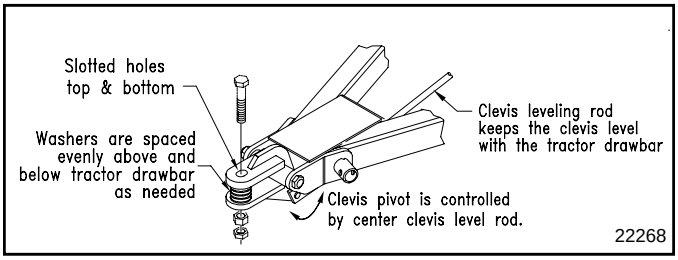
Hitch Types

The cutter is factory supplied with the standard clevis hitch. Other optional hitches are available. See your nearest Land Pride dealer should you want to change your hitch set-up.

Standard Clevis Hitch

Refer to Figure 1-2:

A level rod attached to the underside of the clevis keeps the clevis parallel with the tractor drawbar at all cutting heights. Cutter rotation about the tractor drawbar is limited to slots located in the clevis' upper and lower plates and drawbar hole size. Hitch should be secured to the tractor tongue with bolt, washers and nuts to prevent spreading of clevis.

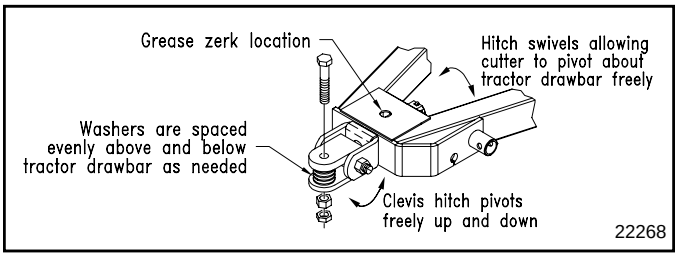

Slotted holes top & bottom
Washers are spaced evenly above and below tractor drawbar as needed
Clevis leveling rod keeps the clevis level with the tractor drawbar
Clevis pivot is controlled by center clevis level rod.
22268

Standard Clevis Hitch
Figure 1-2

Double Swivel Clevis Hitch (Optional)

Refer to Figure 1-3:

The swivel clevis hitch allows the cutter to pivot about the tractor drawbar freely in two directions. It is designed for cutting hillsides, reducing the twisting torque on the cutter hitch and tractor drawbar. Hitch swivel is greaseable.

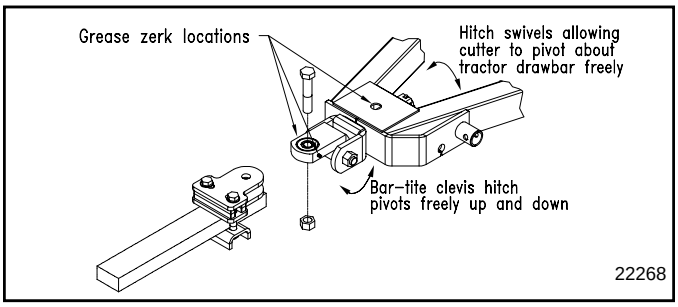

Grease zerk location
Hitch swivels allowing cutter to pivot about tractor drawbar freely
Washers are spaced evenly above and below tractor drawbar as needed
Clevis hitch pivots freely up and down
22268

Double Swivel Clevis Hitch
Figure 1-3

Bar-Tite Hitch (Optional)

Refer to Figure 1-4:

The Bar-Tite hitch functions the same as the swivel clevis hitch except it is constructed of case hardened steel and has a bushing in the tongue to extend hitch life. Bushing and hitch swivel are greaseable.


Grease zerk locations
Hitch swivels allowing cutter to pivot about tractor drawbar freely
Bar-tite clevis hitch pivots freely up and down
22268

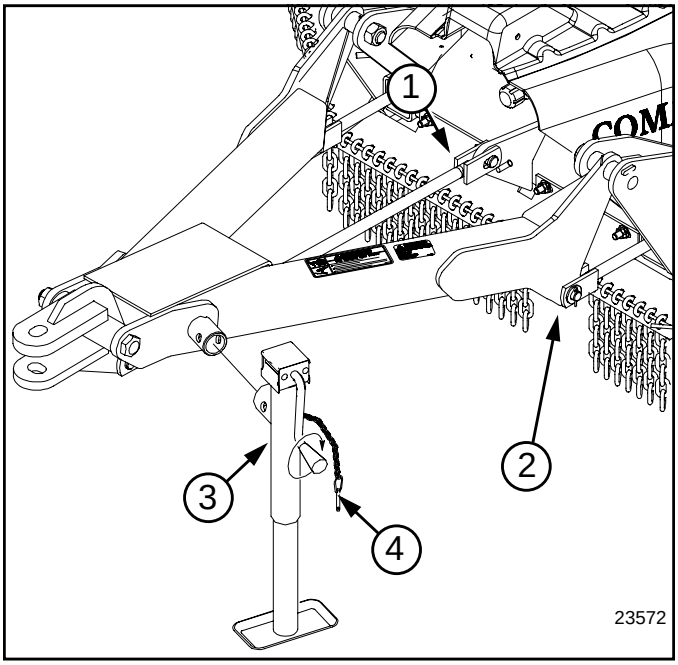
Bar-Tite Hitch
Figure 1-4

Hitch Assembly

Refer to Figure 1-5:

Instructions below are for cutters equipped with a standard clevis hitch only. See Figure 1-2 on for an illustration of a standard clevis hitch.

1. Install clevis rod (#1) to the lug on the center deck weldment using 3/4" x 1 1/2" clevis pin, 3/4" flat washer and 1/8" x 1 1/4" cotter pin.
2. Install left and right leveling rods (#2) to the hitch frame with 3/4" x 1 1/2" clevis pins, 3/4" flat washers, and 1/8" x 1 1/4" cotter pins. Final adjustment should be made when the cutter is attached to the tractor.
3. Install parking jack (#3) to the hitch frame and secure with attached pin. Adjust parking jack to preferred drawbar height.



Hitch Assembly Illustration
Figure 1-5

Wing Axle Assembly

WARNING!

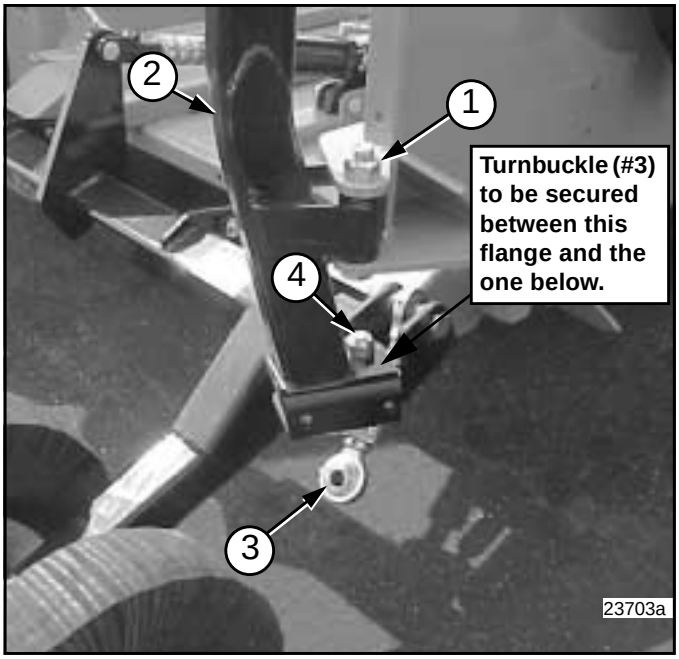
Connect turnbuckle #3 to wing axle #2 before lowering wing. Otherwise, personal injury or damage to the turnbuckle can occur.

NOTE: Do not tighten the hardware until assembly is complete.

Refer to Figure 1-6

Wing axle locknuts are tightened for shipping purposes.

1. Loosen lock nut (#1) slightly (2-places) and rotate wing axle (#2) to install turnbuckle (#3).
2. Remove cap screw and locknut (#4).
3. Attach turnbuckle (#3) to the wing axle with existing cap screw and lock nut (#4).
4. Tighten locknut (#1) until snug (2-places). Do not overtighten. Allow wing angle to pivot.
5. Tighten locknut (#4) to the correct torque.

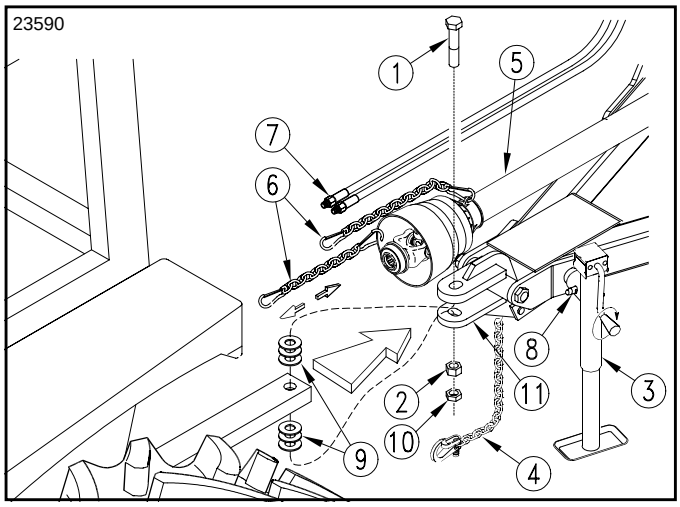


Wing Axle - Turnbuckle Assembly
Figure 1-6

Tractor Hook-up to Standard Clevis Hitch

DANGER!

*A Crushing Hazard exist when hooking-up equipment to a tractor. **Do not** allow anyone to stand between the tractor and implement while backing-up to the implement. **Do not** operate hydraulic 3-point lift controls while someone is directly behind the tractor or near the implement.*



Tractor Hookup to Standard Clevis Hitch
Figure 1-7

Refer to Figure 1-7:

IMPORTANT: Jack attachment pin (#8) must be fully inserted and secured before working on or around a cutter that is not hooked to the tractor drawbar.

NOTE: Items 1, 2, 9 and 10 shown in Figure 1-7 are not furnished by Land Pride.

1. Make certain the parking jack (#3) is properly attached to the cutter hitch and secured with attachment pin (#8).
2. Back tractor within close proximity of cutter clevis (#11).
3. Raise or lower the parking jack (#3) to align clevis (#11) with the tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
4. Back tractor up to cutter hitch until holes in the drawbar and clevis (#11) are aligned.
5. Insert 1" flat washers (#9) equally above and below tractor drawbar until both spaces between drawbar and clevis plates are filled.
6. Insert 1" x 5" gr5 hex bolt (#1) through top of clevis (#11), 1" washers (#9), drawbar, remaining 1" washers (#9) and out through bottom of clevis (#11). Secure hex bolt with nut (#2). Tighten nut snugly to remove all play and then back nut one-quarter turn. Tighten jamb nut (#10) against nut (#2).
7. Lower parking jack (#3) until hitch weight is supported by drawbar. Remove parking jack from hitch and store on left hand deck wing storage base. Prevent water and freeze damage by storing it so that the foot is level or lower than the head, especially when the wing is folded up. See cover picture for correct position.
8. Attach hitch safety chain (#4) to the tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.

Tractor Hook-up to Swivel Clevis Hitch

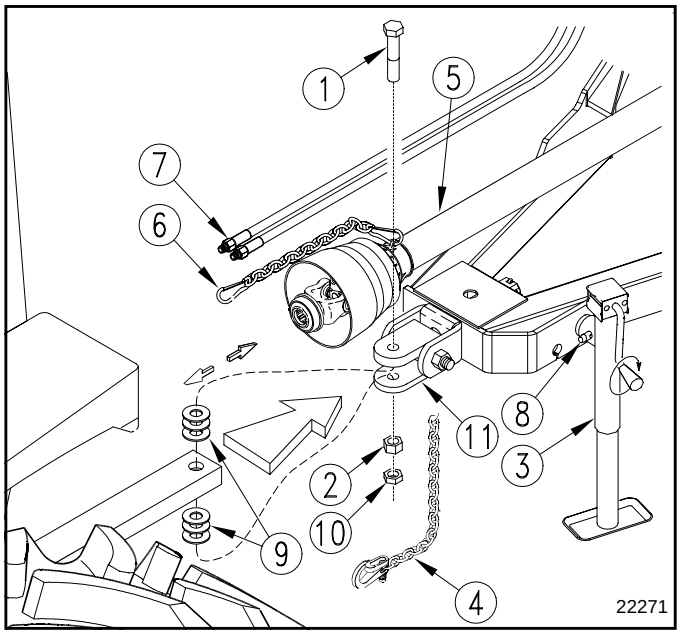
DANGER!

A Crushing Hazard exist when hooking-up equipment to a tractor. ***Do not*** *allow anyone to stand between the tractor and implement while backing-up to the implement.* ***Do not*** *operate hydraulic 3-point lift controls while someone is directly behind the tractor or near the implement.*

Refer to Figure 1-8:

IMPORTANT: Parking jack attachment pin (#8) must be fully inserted and secured before working on or around a cutter that is not hooked to the tractor drawbar.

1. Make certain the parking jack (#3) is properly attached to the cutter hitch and secured with attachment pin (#8).
2. Back tractor within close proximity of cutter clevis (#11).



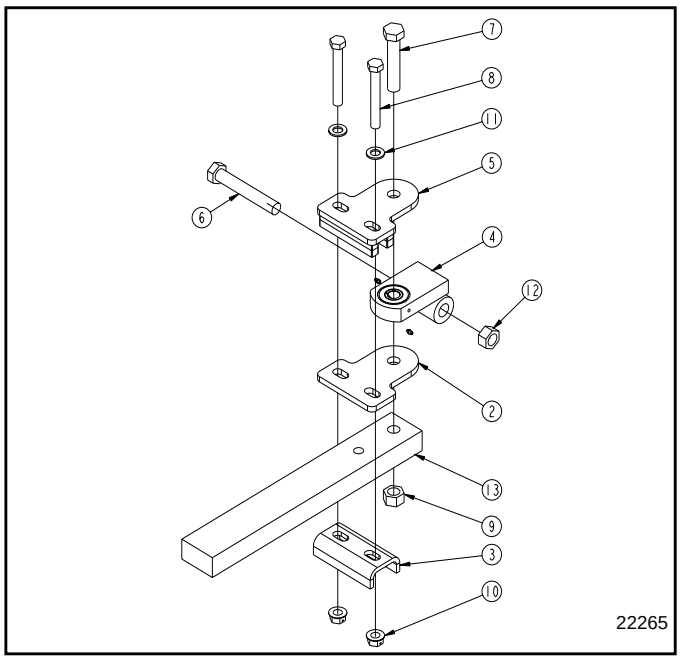
Tractor Hookup to Swivel Clevis Clamp Hitch
Figure 1-8

3. Raise or lower parking jack (#3) to align clevis (#11) with tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
4. Back tractor up to cutter hitch until holes in the drawbar and clevis (#11) are aligned.
5. Insert 1" flat washers (#9) equally above and below tractor drawbar until both spaces between drawbar and clevis plates are filled.
6. Insert 1" x 5" gr5 hex bolt (#1) through top of clevis (#11), 1" washers (#9), drawbar, remaining 1" washers (#9) and out through bottom of clevis (#11). Secure hex bolt with nut (#2). Tighten nut snugly to remove all play and then back nut one-quarter turn. Tighten jamb nut (#10) against nut (#2).
7. Lower parking jack (#3) until cutter weight is removed from the jack. Remove jack from hitch and store it on the storage base located on top of the weight box.
8. Attach hitch safety chain (#4) to the tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.

Tractor Hook-up to Bar-Tite Hitch

Refer to Figure 1-9:

1. Attach Bar-Tite hitch to tractor drawbar:
   a. Insert 1" x 5" hex bolt (#7) through hitch top plate (#5), hitch weldment with bushing (#4), hitch base weldment (#2) and tractor drawbar (#13) as shown. Secure with 1" lock nut (#9). Tighten lock nut snugly to remove all play and then back nut one-quarter turn. **Do Not** torque 1" lock nut.
   b. Insert two 3/4" x 5 1/2" gr5 hex bolts (#8) through, 3/4" flat washers (#11), hitch top plate (#5), hitch base weldment (#2) and formed hitch support (#3) as shown. Secure with 3/4" lock nuts (#10).
   c. Tighten 3/4" lock nuts to the correct torque. See *Torque Values Chart* on page 42.
   d. Remove 1" x 6 1/2" gr5 hex bolt (#6) and 1" lock nut (#12) from hitch weldment (#4).



Bar-Tite Hitch Assembly to Tractor Tongue
Figure 1-9

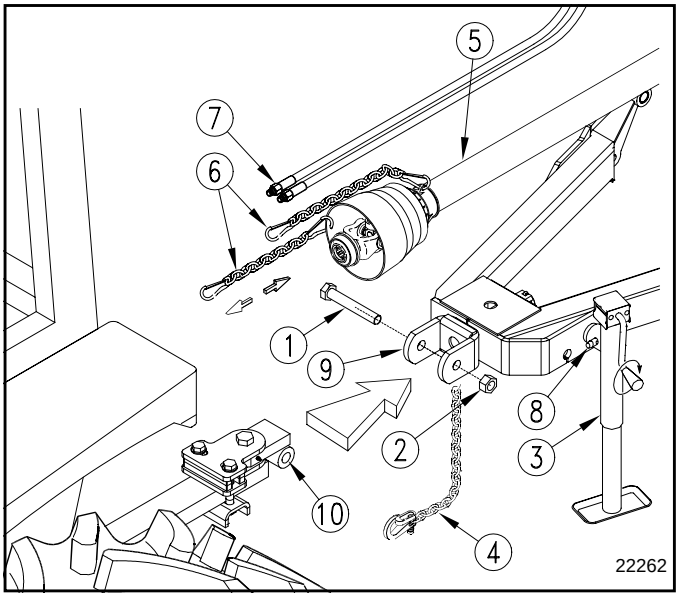
DANGER!

A Crushing Hazard exist when hooking-up equipment to a tractor. ***Do not*** *allow anyone to stand between the tractor and implement while backing-up to the implement.* ***Do not*** *operate hydraulic 3-point lift controls while someone is directly behind the tractor or near the implement.*

Refer to Figure 1-10:

IMPORTANT: Parking jack attachment pin (#8) must be fully inserted and secured before working on or around a cutter that is not hooked to the tractor drawbar.

2. Make certain the parking jack (#3) is properly attached to the cutter and secured with attachment pin (#8).
3. Back tractor within close proximity of cutter hitch.
4. Raise or lower parking jack (#3) to align hitch (#10) with bolt hole in swivel clevis (#9).
5. Back tractor up to cutter swivel hitch (#9) until hole in hitch weldment with bushing (#10) aligns with holes in swivel clevis (#9).
6. Insert 1" x 6 1/2" gr5 hex bolt (#1) through the cutter swivel hitch (#9) and hitch weldment (#10). Secure hex bolt with lock nut (#2). Tighten lock nut snugly to remove all play. **Do Not** torque 1" lock nut.
7. Lower parking jack (#3) until cutter weight is removed from the jack. Remove parking jack from the hitch and store it on the storage base located on top of the weight box.
8. Attach hitch safety chain (#4) to the tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.



Tractor Hookup to Bar-Tite Hitch
Figure 1-10

Driveline Installation

DANGER!

Do not *engage tractor PTO while hooking-up and unhooking the driveline or stand near a rotating driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.*

CAUTION!

Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key and wait for blades to come a complete stop before dismounting from tractor.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to "Lubrication Points" on page 32.

IMPORTANT: Do not attempt to operate a 540 RPM driveline at 1,000 RPM or a 1,000 RPM driveline at 540 RPM. Many tractors provide both 540 and 1,000 RPM PTO speeds. Check your tractor's manual to determine its capabilities.

IMPORTANT: Read and understand "Section 2: Operating Instructions" beginning on page 19 before operating the Rotary Cutter.

The main driveline may be either constant velocity type or conventional type. Pull-collar couplers and retaining bolts are used to connect the driveline to the tractor and implement gearbox.

A driveline that is too long can damage the tractor, gearbox and/or driveline. Always check driveline length with cutter hitched to the tractor before engaging the PTO.

Check Driveline Length

IMPORTANT: The Rotary Cutter must be hitched with tractor and cutter aligned in a straight line on a level surface. This arrangement provides correct alignment between tractor and gearbox PTO shafts.

1. Park tractor and cutter in a straight line on a level surface. Place gear selector in park, shut tractor engine off, set park brake and remove switch key.
2. Attach pull-collar coupler to tractor PTO shaft and bolted coupler to divider gearbox shaft. Skip to step 5 if driveline fits between tractor and implement.

Refer to Figure 1-11:

3. The PTO driveline will require shortening if it does not fit between tractor and cutter gearbox. Shorten driveline as follows:
   a. Pull driveline apart as shown in Figure 1-11.
   b. Attach pull-collar coupler to the tractor PTO shaft and bolted coupler to the divider gearbox shaft. Pull on each driveline section to be sure the universal joints are secured to the shafts.
   c. Hold driveline sections parallel to each other to determine if they are too long. The inner and outer shields on each section should end approximately 1" short of reaching the universal joint shield on the adjacent section (see **"B"** dimension). If they are too long, measure 1" (**"B"** dimension) back from universal joint shield and make a mark at this location on the inner and outer driveline shields.

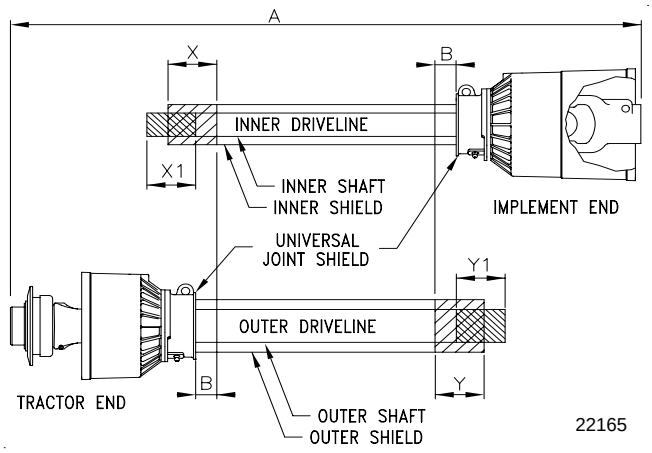
d. Cut off inner shield at the mark ("**X**" dimension). Cut the same amount off the inner shaft ("**X1**" dimension). Repeat cut off procedure ("**Y**" & "**Y1**" dimensions) to the outer driveline half.

e. Remove all burrs and cuttings.

f. Apply multi-purpose grease to the inside of the outer shaft and reassemble driveline.

g. Attach inner driveline yoke end to the divider gearbox shaft.

h. Attach outer driveline yoke end to the tractor's shaft.



PTO Driveline Shortening
Figure 1-11

4. The driveline should now be moved back and forth to insure both ends are secured to the tractor and cutter PTO shafts. Reattach any end that is loose.

IMPORTANT: Two small chains are supplied with each driveline. These chains must be attached to the outer and inner driveline shields and to the cutter deck or hitch to restrict the shields from rotating.

5. Refer to Figure 1-10 on page 16. Secure chains (#6) on driveline (#5) around hitch clevis rod to restrict driveline outer shield from rotating. Re-latch safety chain to driveline guard.

6. Attach safety chain located on the other end of the driveline (#5) to the cutter's main frame to restrict driveline inner shield from rotating. Re-latch safety chain to driveline guard.

Hydraulic Hook-up

Refer to Figure 1-10 on page 16:

The Rotary Cutter is equipped with two hydraulic cylinders with one in the center for lifting the cutter and one on the wing for folding the wing. Both cylinders on the cutter are set-up for single action (one-way) operation.

Each duplex outlet on your tractor can perform only one operation. One outlet is needed for lifting the cutter and the other for lifting the wing.

Your Land Pride dealer can help you determine the best configuration that will match your needs and your tractor capabilities. Optional control valve kits are available if the tractor does not have the required number of duplex outlets. For additional information, See Hydraulic Outlets on page 12

DANGER!

Hydraulic fluid under pressure can penetrate skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin, it must be treated by a doctor within a few hours or gangrene may result.

1. Route cylinder hoses (#7) through hose support loop and connect to tractor remote outlets.
2. Cycle hydraulic system by raising and lowering center deck cylinder and wing fold cylinder. It may be necessary to purge the hydraulic system of trapped air if operation is sluggish.

WARNING!

Be sure center deck and wings are lowered to the ground and all hydraulic pressure is relieved before disconnecting any hydraulic lines or fittings between the Rotary Cutter and tractor hydraulic system.

The hydraulic system may be purged as follows:

a. With wing lowered to the ground, loosen hydraulic hose fitting at wing cylinder slightly to allow fluid to escape.

b. Slowly activate tractor control valve to purge any trapped air from the system.

c. Tighten each fitting.

3. The center deck lift cylinder is purged in the same manner as the wing cylinder. The lift cylinder must be fully retracted and the cutter resting on the ground before loosening hose fitting as described in 2a above.
4. Check driveline for adequate clearance under all ranges of cutter height. With driveline shaft attached to the tractor, slowly raise and lower cutter to its upper and lower limits while observing clearances between hitch and driveline. Adjust tractor drawbar height and/or length if driveline interferes. See Figure 1-1 on page 12 for correct drawbar dimensions.

Unhooking From the Cutter

1. Park cutter on a level solid hard surface. Place tractor gear selector in park and set park brake.
2. Refer to “Transporting The Cutter”, Figure 2-1 & Figure 2-2 on page 20. Raise the wing up in the transport position and place transport lock bar in the locked position. Make sure transport bar is secured in place with lock pin (#2) and hair pin (#1).
3. Remove stroke control spacers from the center hydraulic cylinder and lower cutter until front skids are resting on the ground. Replace stroke control spacers as needed to support wheels at this position.
4. With tractor gear selector in park and park brake set, shut tractor engine off, and remove switch key. Move cylinder lift levers back and forth to release hydraulic line pressure.
5. Refer to “Hitch Assembly Illustration” (Figure 1-5) on page 13. Remove parking jack (#3) from the weight box and install to the cutter hitch. Secure parking jack in place with attached jack pin (#4).
6. Adjust parking jack as needed to remove hitch pin.
7. Remove hitch pin and unhook hydraulic hoses from tractor. Store hose ends on cutter deck.
8. Lower parking jack to rest cutter on its front skids.

Pre-start Checklist

Hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training involved in the operation, transport, maintenance and storage of the cutter. Before beginning to operate your cutter, the following inspections should be made.

- Read and follow the Safety Rules carefully, refer to **"Important Safety Information"** starting on page 1.
- Read all of the *Tractor Hook Up* in the **"Assembly and Set-up"** section on page 13, and all preparation instructions.
- Read the **"Operating Instructions"** section starting on page 19.
- Refer to the **"Maintenance and Lubrication"** section starting on page 25 to lubricate the cutter as required.
- Check the cutter initially and periodically for loose bolts and pins, refer to the *Torque Values Chart* in the **"Appendix"** section on page 42.
- Make sure all guards and shields are in place, refer to **"Important Safety Information"** starting on page 1.
- Gearbox Gear Lube, refer to the **"Maintenance and Lubrication"** section starting on page 34.

Cutter Set-up For Transporting

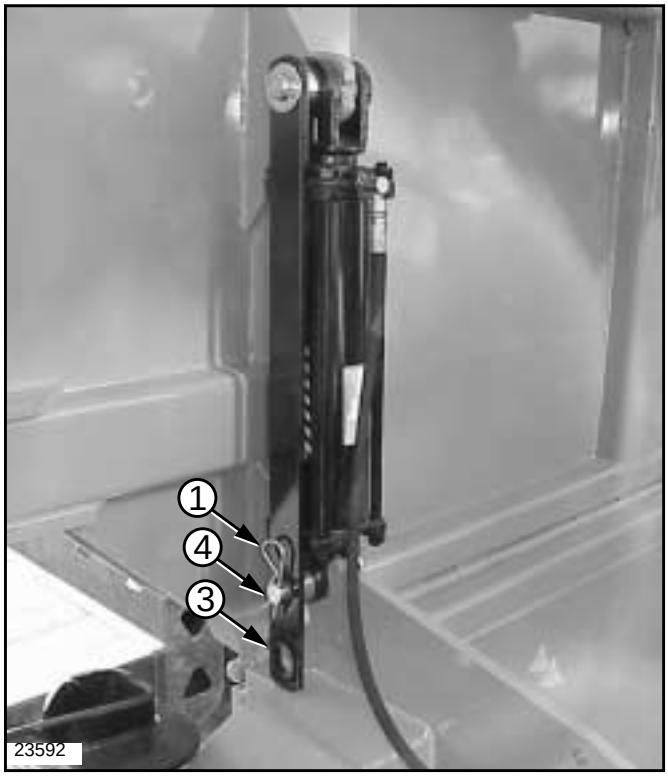
Refer to Figure 2-1 & Figure 2-2:

IMPORTANT: Always disengage the tractor's PTO before raising the wing to transport position. Drivelines and gearboxes will be damaged if the wing is raised while the PTO is turning.

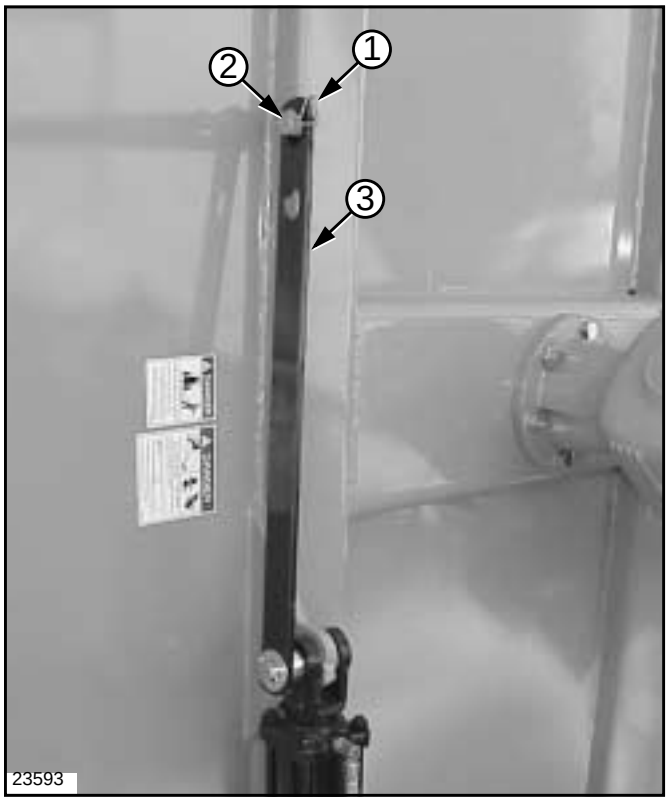
NOTE: The wing is controlled with one hydraulic lift cylinder. Be certain that the wing hydraulics are attached to the tractor and the hydraulic hoses are full of oil before proceeding.

If the cutter wing is down, it will need to be raised before transporting on a road and/or through narrow openings.

1. **Disengage tractor PTO** and wait for the cutter blades to come to a complete stop before raising the wing.
2. Raise the cutter wing fully up with the hydraulics.
3. Place tractor gear selector in park, shut tractor engine off, set park brake, remove switch key and dismount from tractor.
4. See Figure 2-2. Remove hairpin clip (#1) from storage pin (#2).
5. Rotate end of transport lock bar (#3) to cylinder pin (#4) as shown in Figure 2-1. Secure with hairpin clip (#1).



Transport Bar, Locked Position
Figure 2-1



Transport Bar, Storage Position
Figure 2-2

Transporting The Cutter

CAUTION!

When traveling on public roads at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all federal, state and local laws.

1. Be sure to reduce tractor ground speed when turning and leave enough clearance so the cutter does not contact obstacles such as buildings, trees or fences.
2. Select a safe ground speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
3. When traveling over rough or hilly terrain, shift tractor to a lower gear.

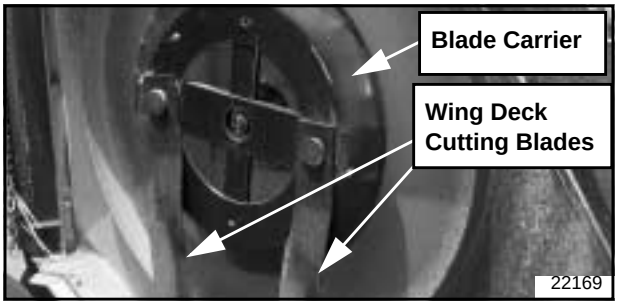
Cutter Set-up For Field Operation

WARNING!

The following operational procedures should be carried out by the tractor operator. Other persons should be cleared of the area even during cutter set-up. Cutter operation should be stopped when in the vicinity of other persons.

Refer to Figure 2-3:

1. Inspect the wing blade carrier and cutting blades prior to lowering the wing. The cutting blades may become locked together (overlapped) when the wing is raised to transport position. Operating the cutter under such circumstances will result in severe deck vibration. Inspect the wing deck for a locked blade condition prior to power-on operation. Use a pry bar or other tool to separate the blades when necessary.



Wing Deck Blade Positioning
Figure 2-3

NOTE: The cutter height is controlled with a hydraulic lift cylinder.

Refer to Figure 2-1 & Figure 2-2 on page 19:

2. Fully raise the wings to release any tension on the transport lock bar as shown in Figure 2-1. Remove hairpin clip (#1) from both the left and right cylinder pins (#4).
3. Rotate end of transport lock bar (#3) to the storage pin (#2) as shown in Figure 2-2. Secure with hairpin clips (#1).
4. Lower the wing section to the down position.
5. Increase throttle to approximately 1/4 engine speed and slowly engage driveline. Also see note below.

NOTE: Use tractor's PTO soft start option if available.

6. Ensure that all power shafts are rotating and that the cutter has no vibration.
7. Continue to increase throttle to full 540 or 1000 PTO speed before commencing forward operation.

Operating Speed & Turning Angle

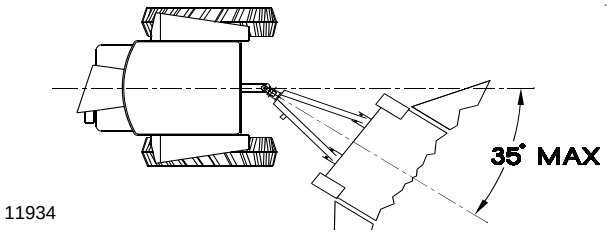
Refer to Figure 2-4 & Figure 2-5:

Optimum ground speed depends on the density of the material being cut, the horsepower rating of the tractor, and terrain. Always operate the tractor at the cutter's full rated PTO speed in a gear range that allows the cutter to make a smooth cut without lugging the tractor down, usually between 2 to 5 mph.

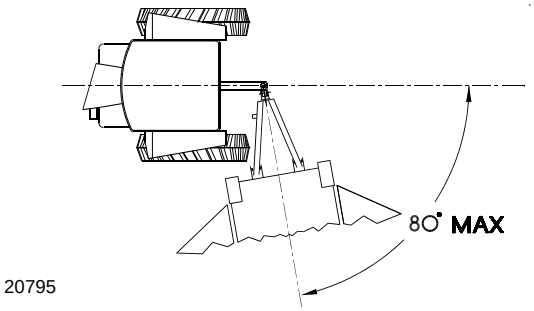
Avoid tractor-to-cutter turning angles exceeding 35 degrees (Figure 2-4) if the main driveline is a standard conventional shaft. Turning angle may be increased to 80 degrees (Figure 2-5) if the cutter is equipped with a constant velocity driveline shaft. These extreme angles are intended for intermittent usage only and not prolonged usage. Plan your field cutting to minimize the number of turns as well as extreme turning angles.

WARNING!

Do not operate this cutter under any terrain conditions where, on a continuous cut, the wing angle exceeds 45 degrees up. Ensure that the wing wheels are in continuous ground contact at all times. Use the float position of your tractor's hydraulic system to provide automatic wing float position for varying terrain conditions.



Conventional U-Joint Driveline
Figure 2-4



Constant Velocity (CV) Driveline
Figure 2-5

General Operating Instructions

CAUTION!
To prevent personal injury caused by thrown objects, the use of front & rear safety guards is strongly recommended! To avoid injury or death from entanglement in rotating drivelines, the drive gearbox shields must be in place and secure when operating.

DANGER!
Rotary cutters have the ability to discharge objects at high speeds; therefore, the use of front & rear safety guards are strongly recommended when cutting along highways or in an area where people may be present.

CAUTION!
Damage may occur if exceeding the rated cutting capacity of the cutter!

CAUTION!
Do not over speed PTO or machine damage may result. RC series are designed for a tractor with 540 RPM rear PTO and RCM series are designed for a tractor with 1000 RPM rear PTO.

DANGER!
Do not lift deck to use cutting blades as a fan. Cutting blades are not properly designed or guarded for this use. Using the deck as a fan can result in injury and/or death.

DANGER!
Do not operate 10 ft. cutters without both the wing and weight box attached to the center deck. Removing the wing or weight box will expose blades and increase risk of cutter overturning. Removing both will expose blades on both sides. Exposed blades can result in serious injury and/or death.

It is important that you familiarize yourself with the Operator's Manual, completed the Operators Checklist, properly attached the cutter to your tractor, made leveling adjustments, and preset your cutting height before beginning a running operational safety check on your Land Pride RC(M)5010 and RC(M)6010 Series Rotary Cutters.

It's now time to do a running operational safety check. It is important that at any time during this safety check you detect a malfunction in either the cutter or tractor that you immediately shut the tractor off, remove the key, and make necessary repairs and/or adjustments before continuing on.

Make sure before starting the tractor that the park brake is engaged, the PTO is disengaged, and the cutter is resting on the ground with the wing down. Start the tractor and set the engine throttle speed at a low idle. Raise the cutter with the tractor's rear hydraulic lift control lever to transport position making sure that the PTO shaft does not bind and does not contact the cutter frame. Lower the cutter to the ground and at a low engine speed engage the PTO. If everything is running smoothly at a low idle, slowly raise the cutter to transport height checking for bind or chatter in the driveline. Lower the cutter to the ground and increase the tractor's engine rpm until it reaches the cutter's full PTO operating speed which will be either 540 or 1000rpm. If everything is still running smoothly, once more raise the cutter to transport height to check for driveline bind or chatter. Lower the cutter to the ground, return the engine to a low idle, and disengage the PTO. Position the adjustable stops on the tractor's hydraulic lift lever so the cutter can be consistently returned to the same cutting and transport height. Make a tight turn to ensure that the rear tractor tires are not coming into contact with the deck.

You should now be ready to transport to your cutting site at a safe ground speed. On roadways, transport in such a manner that faster moving vehicles can easily see you and pass you safely. Reduce your speed when traveling over rough and hilly terrain. Avoid quick or sharp steering corrections. Take extra care to insure that the mower doesn't come into contact with obstacles such as trees, buildings or fences. Use accessory lights and appropriate reflective devices to provide adequate warning to pedestrians and other vehicle operators when traveling on public roads and in the dark of night. Comply with all local, state and federal laws.

It is important that you inspect the area where you will be cutting and clear it of safety hazards and foreign objects either before or after you arrive at the cutting site. Never assume the area is clear. Cut only in areas you are familiar with and are free of debris and unseen objects. Extremely tall grass should be cut twice to detect potential hazards. In the event you do strike an object stop the cutter and tractor immediately to inspect and make necessary repairs to the cutter before resuming operation. It really pays to inspect a new area and to develop a safe plan before cutting.

You will need to maintain either 540 or 1000 rpm PTO speed and 2 to 5 mph ground speed to produce a clean cut. Make a tractor gear and range selection that will enable you to maintain these speed combinations. Generally the quality of cut is better at lower ground speeds. Dense ground cover will create the need to slow down even more. In certain conditions tractor tires will roll grass down resulting in an uneven cut when the grass fails to rebound. Should this happen you may try reversing the direction of cut and/or double cut to achieve the desired finish. Avoid very low cutting heights especially on extremely uneven terrain. Always cut

downward on slopes and avoid crossing the face of steep slopes. Avoid sharp drops and cross diagonally through dips to prevent hanging up the tractor and cutter. Slow down in turns and avoid sharp turns if at all possible. Remember to look back often.

Now that you're prepared and well briefed you may begin cutting. Begin cutting by doing the following:

- Reducing the tractor's engine rpm.
- Make sure the wing is on the ground and the cutter is in cutting position.
- Engage the PTO.
- Raise the engine rpm to the appropriate PTO speed.
- Begin cutting.

Make wide turns when possible. Operators of pull-type models must plan ahead and choose a cutting pattern that allows for wider turns. Try increasing or decreasing ground speed to determine the effect on quality of cut. With a little practice you will be pleased with what you and your Land Pride Rotary Cutter can do.

Whether you are done mowing, need to take a break, or just need to make a few adjustments to the cutter, remember to always do the following:

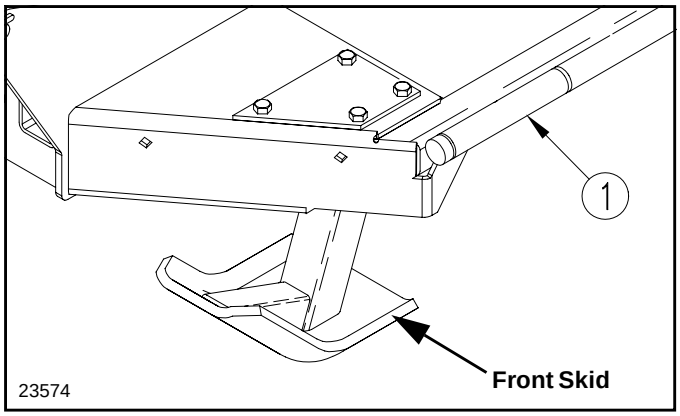
- Reduce the tractor's engine rpm.
- Disengage the PTO.
- Stop on level ground.
- Set the park brake.
- Turn off the engine and remove the key.
- Stay on the tractor until the cutter blades have come to a complete stop.

Center and Wing Section Leveling

These adjustments should be made with the cutter hooked up to the same tractor that will be used for field operations or one having the same drawbar height. Cutter adjusting rods are set at the factory prior to shipment. The adjusting rods control the draw bar height at the hitch clevis.

Refer to Figure 3-1, Figure 3-2 & Figure 3-3:

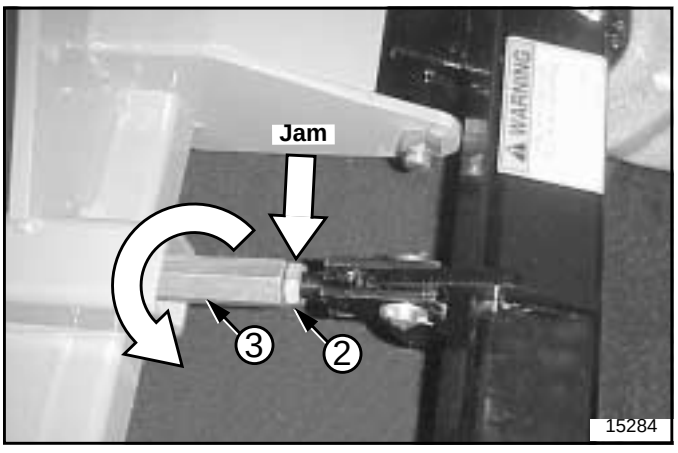
1. Attach the cutter to the tractor and position it on level ground.
2. Raise the wing to locked position.
3. See Figure 3-1. Using the hydraulic lift, adjust the height of the center deck to 2-3 inch clearance between the front skids and ground surface.



Front Skid Position
Figure 3-1

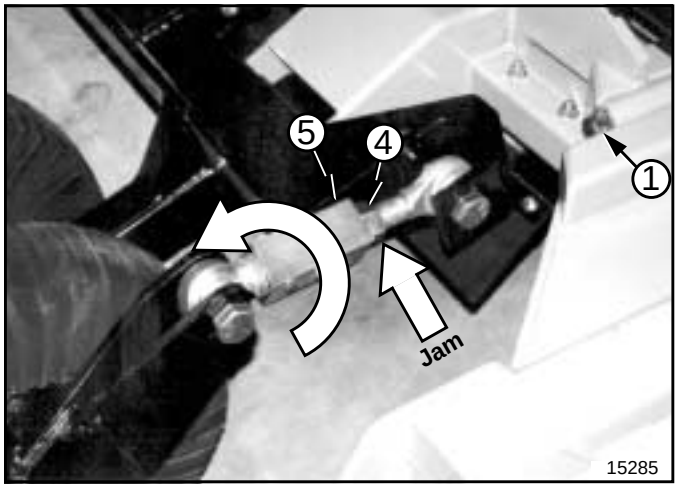
NOTE: Lengthening leveling rods with adjusting nuts (#4) will lower the front of the cutter.

4. See Figure 3-1. Level the left side of the center section from front to rear using measurements from ground line to center of left hand hinge rod (#1). (See Figure 3-2) Loosen jam nut (#2) and rotate the left hand leveling rod adjusting nut (#3) until the center section is level. Re-tighten jam nut (#2).



Center Section Leveling Rod
Figure 3-2

5. Repeat steps 3 and 4 for the right hand leveling rod. Be sure that both left and right leveling rods are equally tight.
6. See Figure 3-3. Lower the wing to ground position. The wing section may need adjusting now that the center section is level. Loosen jam nut (#4) and rotate the adjusting turnbuckle (#5) to desired position. Re-tighten jam nut (#4).

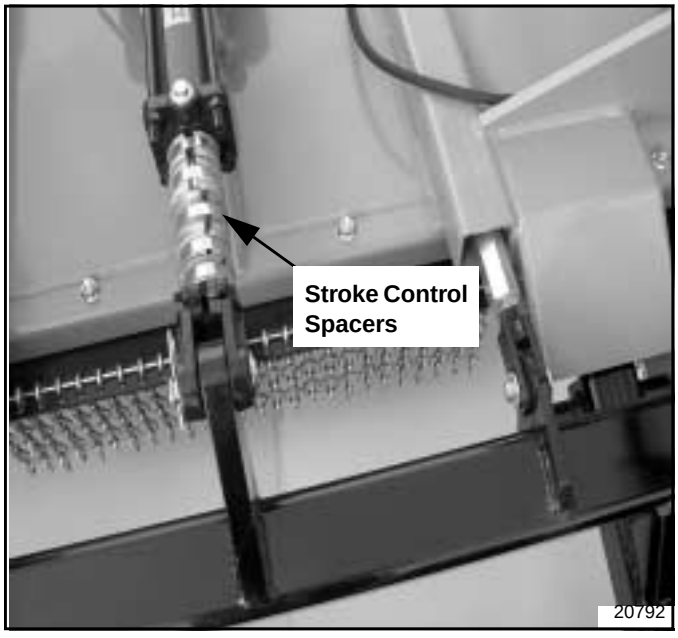


Wing Leveling Turnbuckle
Figure 3-3

Cutting Height Adjustment

Refer to Figure 3-4:

The cutter comes standard with hydraulic height control. Stroke control spacers are supplied to accommodate various cutting heights.



Hydraulic Cylinder With Stroke Control Spacers
Figure 3-4

Safety Guard Options

DANGER!

Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety guards is strongly recommended when cutting along highways and in areas where people may be present.

IMPORTANT: Not all objects will be stopped by the safety guards. Therefore, Land Pride recommends using extreme caution when cutting in public areas. It is best to operate the Rotary Cutter when no one is around except the operator.

Land Pride offers three types of safety guards to best suit your application. They are the rubber guard, single chain guard and double chain guard. The rubber guard is designed for light duty applications. The single chain guard is designed to handle heavier applications where the cutter blades contact solid, dense objects capable of tearing through the rubber. Double chain guards provide the highest degree of protection against objects being thrown.

Part Number & Description

Rubber Guards*

318-350A	Front Rubber Safety Guards
318-698A	Rear Rubber Safety Guards

Single Chain Guards*

318-349A	Front Single Chain Safety Guards
318-697A	Rear Single Chain Safety Guards

Double Chain Guards*

318-351A	Front Double Chain Safety Guards
318-699A	Rear Double Chain Safety Guards

Weight Box Chain Guards

318-354K	Front Chain Guard
318-111K	Rear Chain Guard

*Weight box chain guards are purchased separate from the rubber guards, single chain guards & double chain guards when replacements are needed.

General Maintenance Information

Proper servicing and adjustment is the key to the long life of any implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

Check all bolts after using the unit for several hours to be sure they are tight.

Replace any worn, damaged or illegible safety labels by obtaining new labels from your Land Pride Dealer.

Cutter Blade Maintenance

DANGER!

Always disconnect main driveline from tractor PTO before servicing the underside of the cutter deck. Cutter can be engaged if tractor is started resulting in damage to the cutter, bodily injury and/or death.

WARNING!

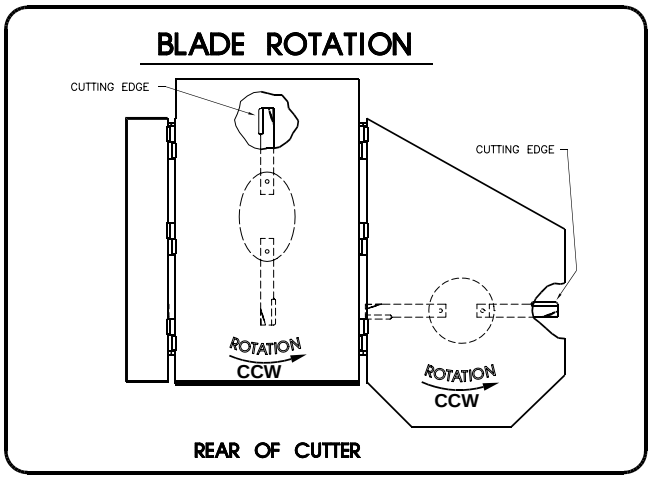
Always secure cutter deck in the up position with solid supports before servicing the underside of the cutter. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the cutter instantly even when power to the hydraulics is shut off.

IMPORTANT: Blades must be ordered and replaced in pairs. Order only genuine Land Pride blades. Land Pride blades are made of special heat treated alloy steel. Substitute blades may not meet Land Pride's specifications and may be dangerous to operate.

1. Always disconnect main driveline from tractor PTO and secure cutter deck in the up position with solid supports before servicing the underside of the cutter.
2. Always inspect cutting blades before each use. Make certain they are properly installed and are in good working condition. Replace any blade that is damaged, worn, bent, or excessively nicked. Small nicks can be ground out when sharpening.
3. Both blades should be sharpened at the same angle as the original cutting edge and must be replaced or re-ground at the same time to maintain proper balance in the cutting unit. The following precautions should be taken when sharpening the blades:
   a. Do not remove more material than necessary.
   b. Do not heat and pound out a cutting edge.
   c. Do not grind blades to a razor edge. Leave a blunt cutting edge approximately 1/16" thick.
   d. Always grind the cutting edge so that the end of the blade remains square to the cutting edge and not rounded.
   e. Do not sharpen the back side of the blade.
   f. Both blades should weigh the same after sharpening with not more than 1 oz. difference.

IMPORTANT: Unbalanced blades will cause excessive vibration which can damage gear box bearings and create structural cracks in cutter

4. Examine blade bolts for excessive wear and replace if necessary. To replace blade bolts:
   a. Order land Pride blade bolt part #802-277C and lock nut #803-170C.
   b. Refer to Figure 5-1: Carefully check the cutting edges of the blades in relation to the blade carrier rotation to ensure correct blade placement.
   c. Torque blade lock nut to 450 ft-lbs. An extended cheater bar may be required.
5. If replacing dishpan, nut on gearbox output shaft should be torqued to 550 ft-lbs. minimum and cotter pin installed in nut with legs securely bent around nut.



Blade Rotation
Figure 5-1

Land Pride Cutter Blade Parts

Part No.	Part Description
820-168C	CUTTER BLADE 1/2 x 4 x 29 CCW (CTR)
820-169C	CUTTER BLADE 1/2 x 4 x 23 CCW (RH WING)
802-277C	BLADE BOLT 1 1/8-12 x 3 7/16 WITH KEY
803-170C	NUT HEX TOP LOCK 1 1/8-12 PLATE
804-147C	WASHER FLAT 1 HARD ASTMF436 PN

Drivelines With Slip Clutches

CAUTION!

Engage parking brake, disengage PTO, shut off tractor, and remove key before working on or around the driveline and/or slip clutch.

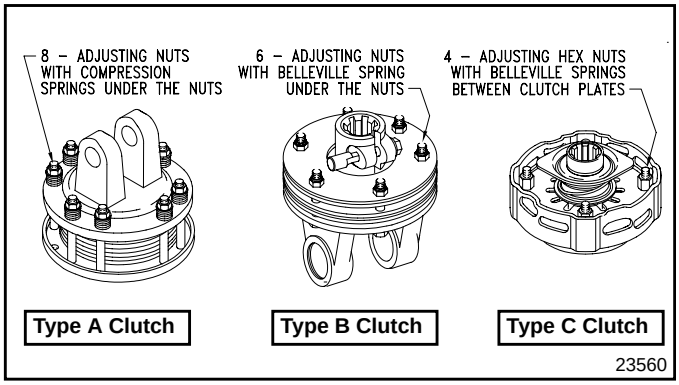
CAUTION!

Slip clutches that have been in use or have been slipped for only two or three seconds during run-in may be too hot to touch. Allow a hot clutch to cool before working on it.

Cutter drive components are protected from shock loads by a friction slip clutch. The clutch must be capable of slippage during operation to protect the gearbox, driveline and other drive train parts.

Friction clutches should be “run-in” prior to initial operation and after long periods of inactivity to remove any oxidation that may have accumulated on the friction surfaces. Repeat “run-in” instructions at the beginning of each season and when moisture and/or condensation seizes the inner friction plates.

Refer to Figure 5-2 to determine which friction clutch your cutter has. Follow “run-in” instructions on the following pages for your specific clutch type.


8 – ADJUSTING NUTS WITH COMPRESSION SPRINGS UNDER THE NUTS
6 – ADJUSTING NUTS WITH BELLEVILLE SPRING UNDER THE NUTS
4 – ADJUSTING HEX NUTS WITH BELLEVILLE SPRINGS BETWEEN CLUTCH PLATES
Type A Clutch
Type B Clutch
Type C Clutch
23560

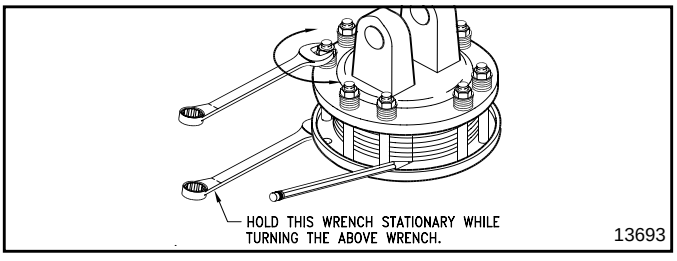
Clutch Types
Figure 5-2

Type A Clutches

Clutch Run-In

Refer to Figure 5-3:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.



Type A Clutch Run-In
Figure 5-3

2. Carefully loosen each of the 8 spring retainer nuts by exactly 2 revolutions. It will be necessary to hold hex end of retainer bolt in order to count the exact number of revolutions.
3. Make sure the area is clear of all bystanders and machine is safe to operate.
4. Start tractor and engage PTO drive for 2-3 seconds to permit slippage of the clutch surfaces. Disengage PTO, then re-engage a second time for 2-3 seconds. Disengage PTO, shut off tractor and remove key. Wait for all components to stop before dismounting from tractor.
5. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See “Clutch Disassembly, Inspection & Assembly” below.
6. Tighten each of the 8 spring retainer nuts on the clutch housing exactly 2 revolutions to restore clutch to original setting pressure.
7. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
8. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage. See Figure 5-5 to adjust spring length.

Clutch Disassembly, Inspection & Assembly

Refer to Figure 5-4:

If clutch run-in procedure above indicated that one or more friction disks did not slip, then the clutch must be disassembled to separate the friction disks.

Disassembly

IMPORTANT: Not all Type A clutch components are arranged as illustrated in Figure 5-4. Also some have more components than others. Be sure to keep track of order and orientation of your clutch components during disassembly.

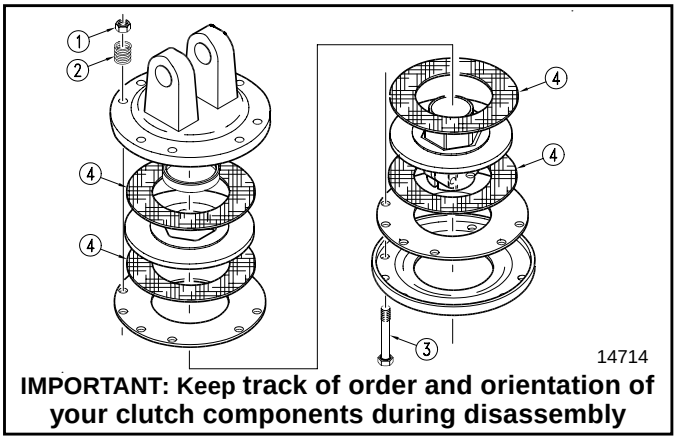
Disassembly of clutch is simply a matter of first removing spring retainer nuts (#1), springs (#2) and bolts (#3) from the assembly. Each friction disk (#4) must then be separated from the metal surface adjacent to it.

Inspection

Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement.The original friction disk thickness is 1/8" (3.2mm) and should be replaced if thickness falls below 3/64" (1.1mm). If clutches have been slipped to the point of “smoking”, the friction disks may be damaged and should be replaced. Heat build-up may also affect the yoke joints.

Assembly

Reassemble each friction disk (#4) next to the metal plate it was separated from. Install bolts (#3) through the end plates and intermediate plates as shown. Place springs (#2) over the bolts and secure with nuts (#1).

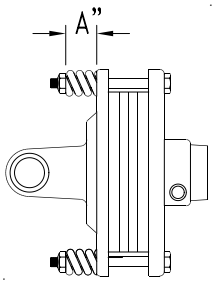


IMPORTANT: Keep track of order and orientation of your clutch components during disassembly

Type A Clutch Disassembly
Figure 5-4

Refer to Figure 5-5 & Table Below:

Progressively tighten each spring retainer bolt until correct spring height “A” is reached.



Type A Clutch Adjustment
Figure 5-5

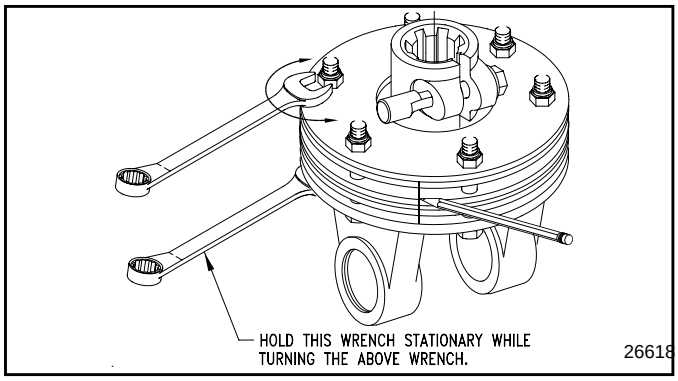
Driveline No.	Driveline Location	PTO Speed	Cat No.	A (inches) Spring Height
826-183C	Center	540	4	1.15" (S/N 566919+) 1.12" (S/N 566918-)
826-184C	Center	1000	4	1.09" (S/N 566919+) 1.02" (S/N 566918-)
826-478C	Center	540/1000	5	1.32"
826-185C	Wing	540/1000	4	1.175" (S/N 566919+) 1.14" (S/N 566918-)
826-481C	Wing	540/1000	5	1.32"

Type B Clutches

Clutch Run-In

Refer to Figure 5-6:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.



Type B Clutch Run-In
Figure 5-6

2. Carefully loosen each of the 6 nuts by exactly 1 revolution. It will be necessary to hold hex end of retainer bolt in order to count the exact number of revolutions.
3. Make sure the area is clear of all bystanders and machine is safe to operate.
4. Start tractor and engage PTO drive at idle for 2-3 seconds to permit slippage of friction plates. Disengage PTO, shut off tractor and remove key. Wait for all components to come to a complete stop before dismounting from tractor.
5. Inspect clutch to ensure that the scribed markings made on the clutch plates and friction disc have changed positions. If any two marks are still aligned, then the clutch did not slip as it should. Skip to step 8 if all clutch plates slipped.
6. If the friction clutch did not slip, loosen the nuts one more revolution. Make sure the nuts have full thread engagement on the bolt and then repeat steps 4 - 5.
7. A clutch that does not slip must be disassembled to separate the friction disk plates. See “Clutch Disassembly, Inspection & Assembly” below.
8. Tighten each of the nuts on the clutch back to their original location to restore clutch pressure.
9. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
10. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage.

Clutch Disassembly, Inspection & Assembly

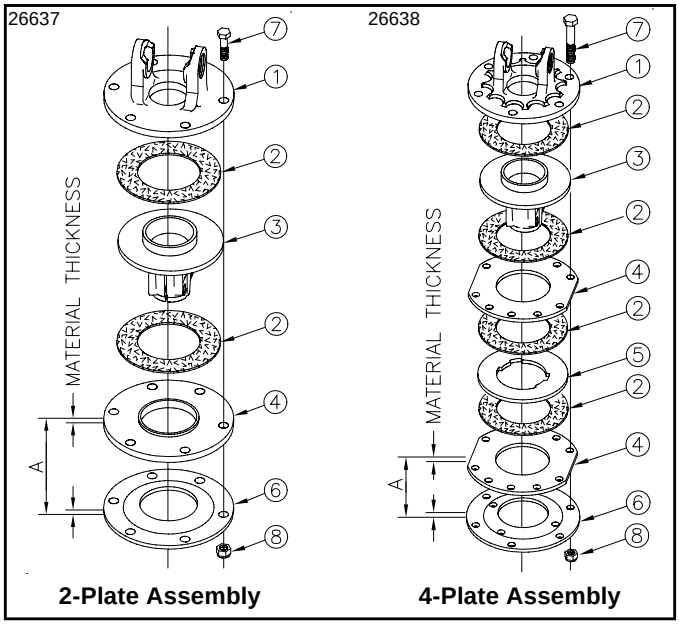
The clutch must be disassembled into its separate friction disks if clutch run-in procedure above indicated that one or more friction disks did not slip. See disassembly instructions on the following page.

Disassembly

Refer to Figure 5-7:

IMPORTANT: If you have already loosened each nut (#8) by 1 or 2 revolutions, retighten nuts before taking measurement (A). Measure distance (A) within (+/-.015") from outside of belleville spring (#6) to outside of plate (#4) on center line of all 6 bolts (#7) and record before disassembling the clutch. These six measurements must be kept and reused when reassembling the clutch to restore the belleville spring to its original pressure setting.

1. Determine if you have a 2-plate clutch or 4-plate clutch. Use matching illustration in Figure 5-7 below.
2. Measure from outside of belleville spring (#6) to outside of plate (#4) on center line of all 6 bolts (#6). Record these distances for reassembly.
3. Remove bolts (#7) evenly & belleville spring (#6).
4. Separate all friction disks (#2) from plates (#4 & #5), hub (#3) and yoke flange (#1).



Type B Clutch Assembly
Figure 5-7

Inspection

Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement.The original friction disk thickness is 1/8" (3.2mm) and should be replaced if thickness falls below 3/64" (1.1mm). If clutches have been slipped to the point of “smoking”, the friction disks may be damaged and should be replaced. Heat build-up may also affect the yoke joints.

Assembly

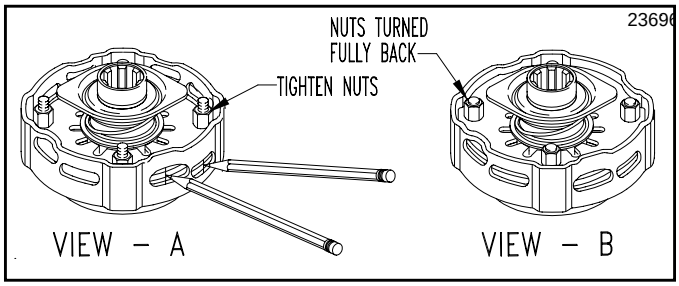
Reassemble each friction disk (#2) next to the metal plate it was separated from. Install bolts (#7) through the end plates and intermediate plates as shown and secure with nuts (#8). Tighten each nut to the measured distance (A) recorded in step 2 during disassembly.

Type C Clutches

Clutch Run-In

Refer to Figure 5-8 (View - A):

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.
2. Tighten all 4 nuts uniformly until spring load is low enough that the clutch slips freely with PTO engaged.



Type C Clutch Run-In
Figure 5-8

3. Make sure the area is clear of all bystanders and machine is safe to operate.
4. Start tractor and engage PTO for 2-3 seconds to permit slippage of clutch surfaces. Disengage PTO, then re-engage a second time for 2-3 seconds. Disengage PTO, shut off tractor and remove key. Wait for all components to stop before dismounting from tractor.
5. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See “Clutch Disassembly, Inspection & Assembly” below.

Refer to Figure 5-8 (View - B):

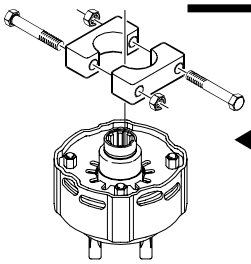
6. If no two marks on the friction disk and plate are still aligned, Turn all 4 nuts fully back.
7. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
8. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage.

Clutch Disassembly, Inspection & Assembly

If clutch run-in procedure above indicated that one or more of the friction disks did not slip, then the clutch must be disassembled to separate the friction disks.

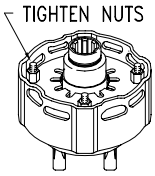
IMPORTANT: Before proceeding, secure the clutch firmly in a vise or other clamping device to prevent injury.

4-Plate Disassembly



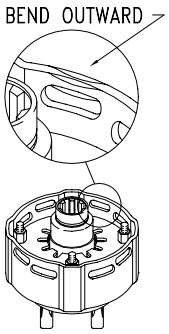
◀ Step 1

If included, remove end half clamps.



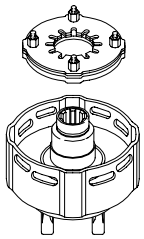
◀ Step 2

Tighten the four hex nuts uniformly until the clutch pack and hub are loose.



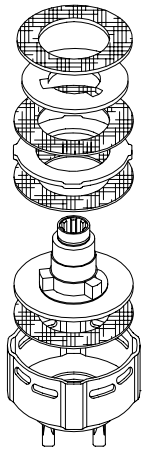
◀ Step 3

Bend all four retaining lugs out on edge of clutch housing.



◀ Step 4

Remove thrust plate with Belleville Springs and lug rings to access friction discs and hub for inspection or service.

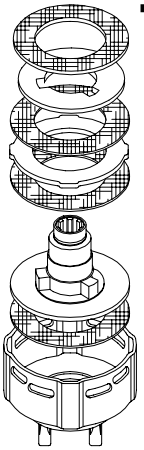


◀ Step 5

Inspect friction discs and hub.

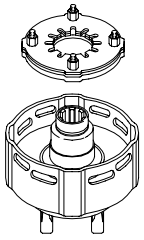
23553

4-Plate Assembly



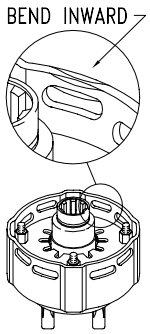
◀ Step 1

Place hub and friction discs into the housing.



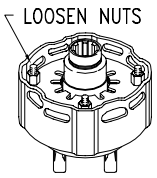
◀ Step 2

Compress Belleville Springs to the pressure plate by tightening the four hex nuts and then placing the assembly into the clutch housing.



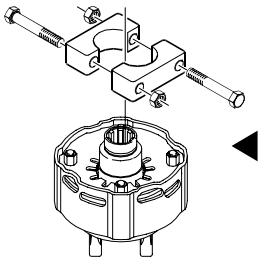
◀ Step 3

Bend retaining lugs inward over the Belleville Spring edges to secure the spring before backing the four hex nuts off.



◀ Step 4

With lugs bent in, loosen the four hex nuts completely to the end of the threaded studs.



◀ Step 5

Install end half clamps if available.

23553

Skid Shoe Maintenance

WARNING!

Excessive wear on skid shoes may cause inadequate operation of cutter and create a safety hazard!

There are two skid shoes mounted on either side of the center section and one skid shoe on the wing section and one on the weight box. Check all skid shoes for wear and replace if necessary. Order only genuine Land Pride parts from your local Land Pride Dealer.

Land Pride Skid Shoe Replacement Parts

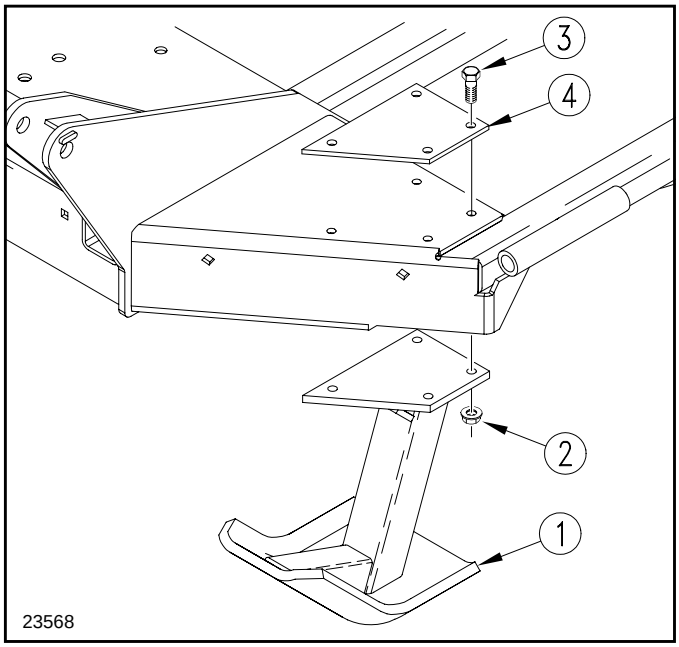
Part No.	Part Description
318-145H	CENTER SKID SHOE (RH)
318-146H	CENTER SKID SHOE (LH)
318-096D	WEIGHT BOX SKID SHOE
318-335D	WING SKID SHOE (S/N292792+)
802-466C	PLOW BOLT, 3/8" - 16 x 1 1/1/4" grade 5

Center Skid Shoe

Refer to Figure 5-9:

Replace center skid shoes as follows:

1. Remove 1/2"-13 hex whiz nuts (#2), 1/2" -13 x 2” gr8 hex bolts (#3) and center skid shoe (#1) as shown.
2. Attach new skid shoe (#1) to cutter with existing 1/2” hex bolts (#3), existing top plate (#4) and secure with existing 1/2" hex whiz nuts. Torque to 105 ft. lbs.
3. Repeat on opposite side of center section.



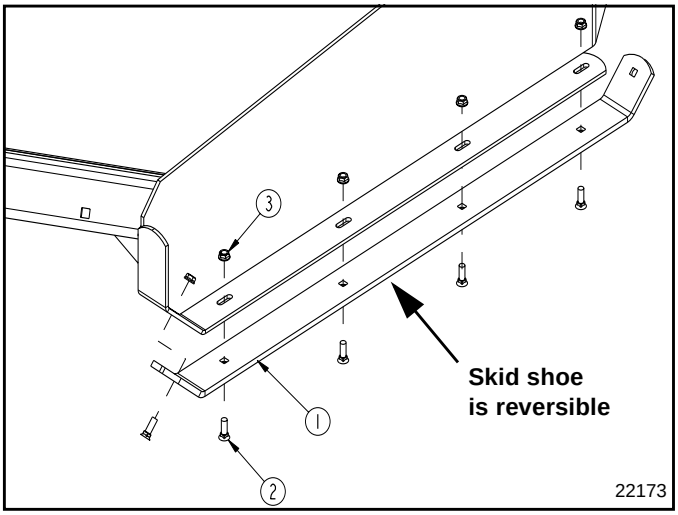
Center Skid Shoe
Figure 5-9

Wing Skid Shoe

Refer to Figure 5-10:

Replace wing skid shoes as follows:

1. Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2) and wing skid shoe (#1) as shown.
2. Plow bolts (#2) should be checked for wear and replaced if necessary.
3. Attach new skid shoe (#1) to cutter with existing 3/8” plow bolts (#2) and secure with 3/8" hex whiz nuts. Torque to 31 ft. lbs.



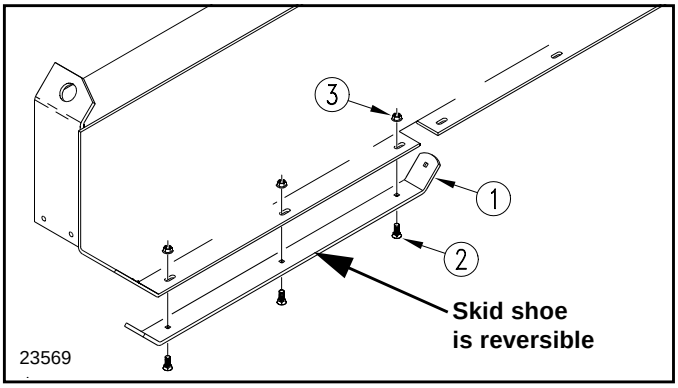
Wing Skid shoe
Figure 5-10

Weight Box Skid Shoe

Refer to Figure 5-10:

Replace wing skid shoes as follows:

1. Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2) and wing skid shoe (#1) as shown.
2. Plow bolts (#2) should be checked for wear and replaced if necessary.
3. Attach new skid shoe (#1) to cutter with existing 3/8” plow bolts (#2) and secure with 3/8" hex whiz nuts. Torque to 31 ft. lbs.



Wing Skid shoe
Figure 5-11

Tractor Maintenance

One of the most important things you can do to prevent hydraulic system problems is to ensure that your tractor's reservoir remains free of dirt and contamination.

Use a clean cloth to wipe the hose ends before attaching them to your tractor. Replace the filter element for your tractor's hydraulic system at the prescribed intervals. These simple maintenances will go a long way to prevent the occurrence of control valve and hydraulic cylinder problems.

Storage

It is good practice to clean, inspect, service and make necessary repairs to the cutter when parking it for long periods and when parking it at the end of a working season. This will help ensure the cuter is ready for field use the next time you hook-up to it.

DANGER!

Always disconnect main driveline from tractor PTO and secure cutter deck in the up position with solid supports before servicing the underside of the cutter.

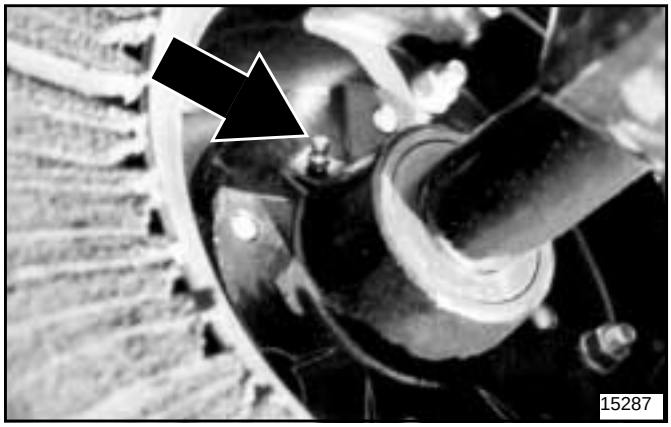
1. Clean off any dirt and grease that may have accumulated on the cutter and moving parts. Scrape off compacted dirt from the bottom of deck and then wash surface thoroughly with a garden hose. A coating of oil may also be applied to the lower deck area to minimize oxidation.
2. Check blades and blade bolts for wear and replace if necessary. See "Cutter Blade Maintenance" on page 25.
3. Inspect for loose, damaged or worn parts and adjust or replace as needed.
4. Lubricate as noted in "Lubrication Points" starting on page 32.
5. Replace all damaged or missing decals.
6. Store cutter on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer cutter life.
7. Follow all unhooking instructions on page 18 when disconnecting tractor from cutter.
8. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Aerosol Land Pride touch-up paint. They are also available in touch-up bottles with brush, quarts and gallon sizes by adding TU, QT or GL to the end of the Aerosol part number.

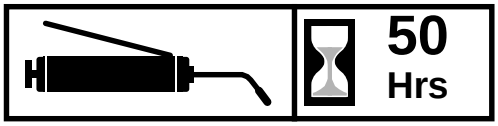
Land Pride Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE SPRAY CAN
821-002C	PAINT LP BLACK SPRAY CAN
821-054C	PAINT MEDIUM RED SPRAY CAN
821-058C	PAINT GREEN SPRAY CAN

Lubrication Points

Lubrication Legend	Multi-purpose spray lube	Multi-purpose grease lube	Multi-purpose oil lube	50 hrs	Intervals in hours at which lubrication is required





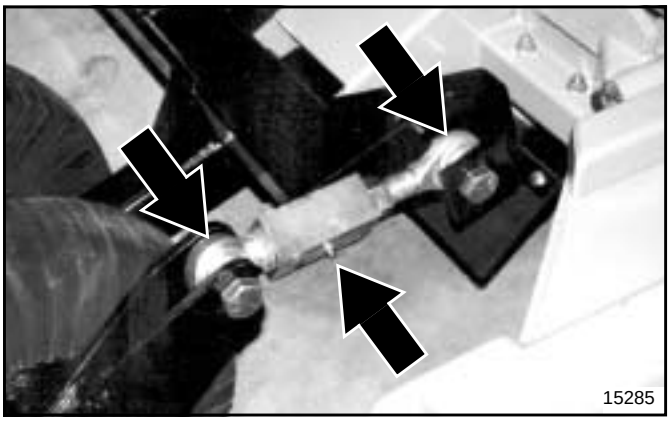
Axle Hub Bearing

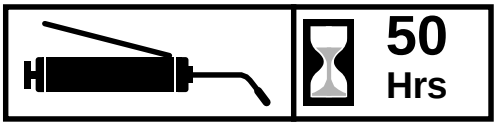
Repack wheel bearings

Type of Lubrication: Wheel Bearing Grease

Quantity = Coat Generously

NOTE: The tailwheel hub is equipped with a relief hole located directly opposite the grease fitting. The relief hole releases pressure from inside the hub casting when it is greased. The hub should be greased until grease purges from the relief hole.

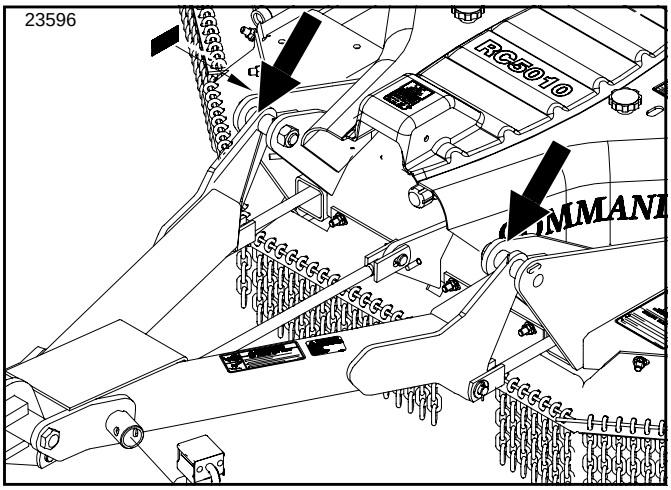


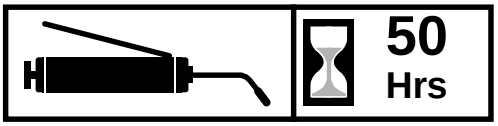


Adjustable Turnbuckle

Type of Lubrication: Multi-Purpose Grease

Quantity = As required

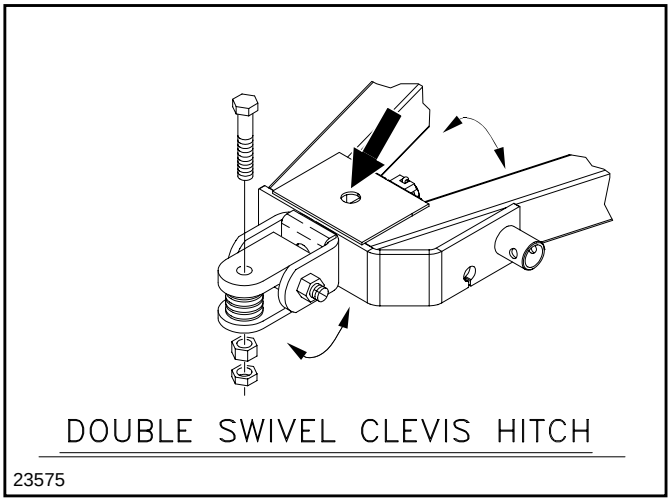


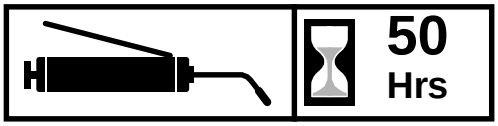


Main Hitch

Type of Lubrication: Multi-Purpose Grease

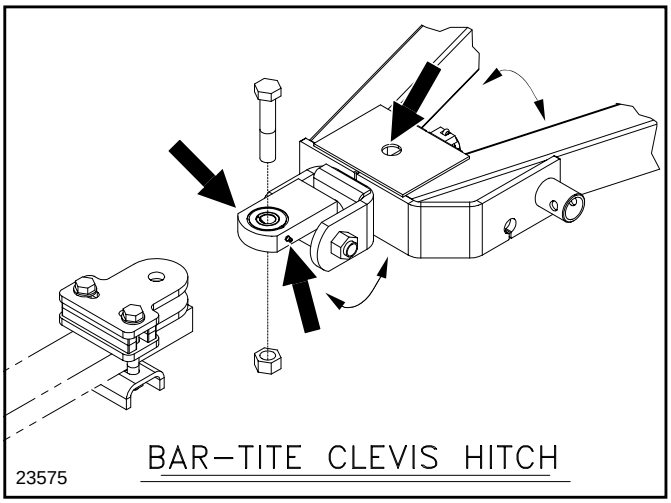
Quantity = As required

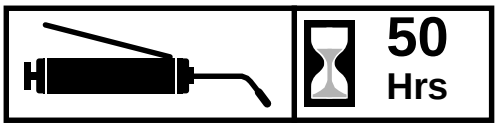




Double Swivel Clevis Hitch

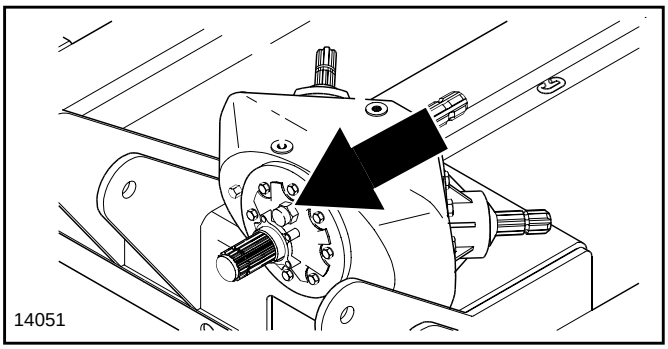
Type of Lubrication: Multi-purpose Grease

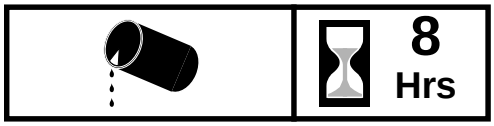




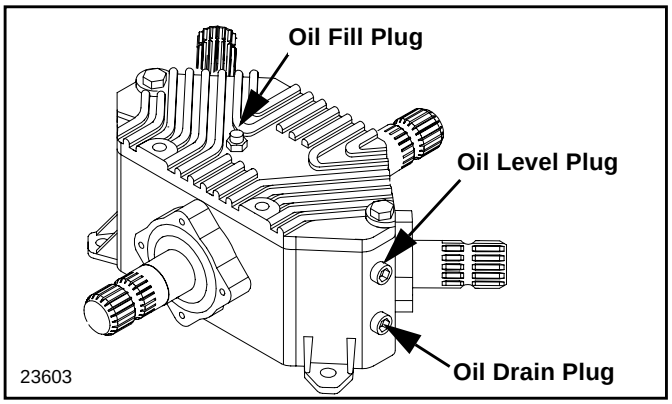
Bar-Tite Hitch

Type of Lubrication: Multi-purpose Grease





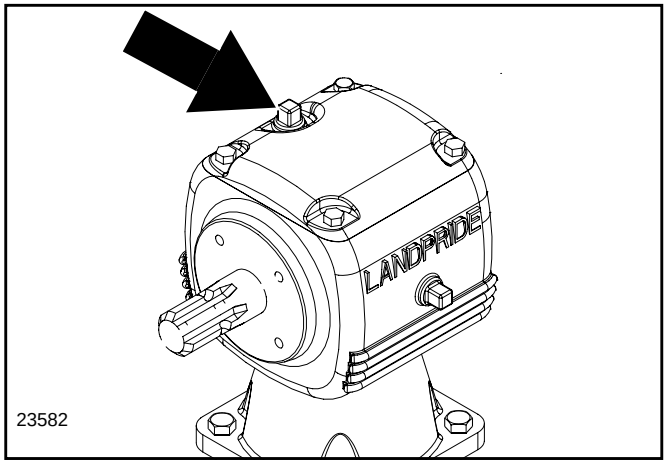
Divider Box



Type of Lubrication: 80-90W EP

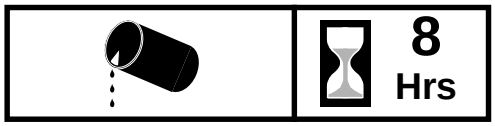
Quantity = As required

NOTE: Do not overfill! Cutter should be level when checking oil. If, for any reason, all oil has been removed from gearbox, refill to level plug and allow air to bleed up from lower cavity, then recheck.



IMPORTANT: Your cutter is shipped with the gearbox vent plug/dipstick installed in the gearbox. Please see your Land Pride dealer if the vent plug/dipstick was not included.

Gearbox



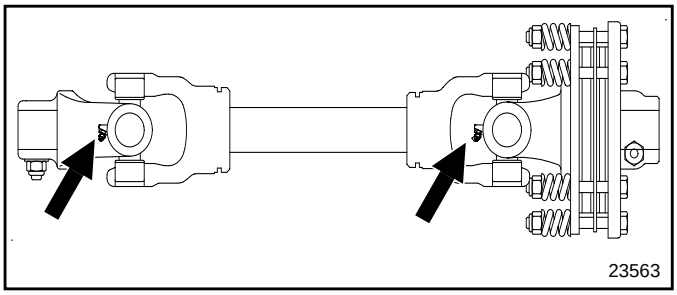
IMPORTANT: Do not overfill! Level cutter and wait for gearbox oil to cool before checking. An unlevel cutter or a gearbox with hot oil will not show correct oil level on the dipstick.

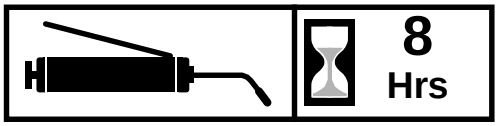
Make sure wings are down. Unscrew top vent plug in gearbox to remove dipstick. Wipe excess oil from dipstick and screw it back into the plug hole. Remove dipstick again and check oil level mark on dipstick. If low, fill through top plug hole in gearbox with EP90 oil until oil reaches full mark on dipstick. Reinstall vent plug with dipstick and tighten.

Take your gearbox to a Land Pride dealer if it requires service.

Type of Lubrication: EP90 Oil

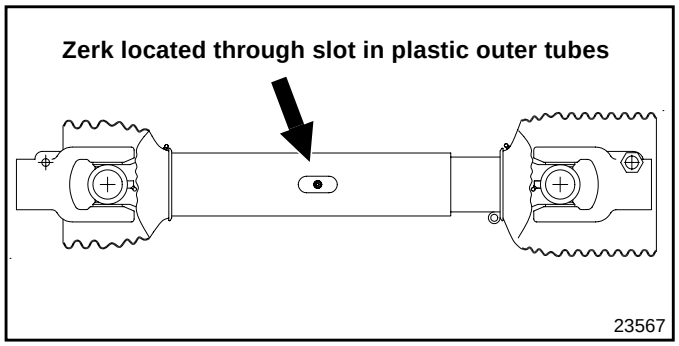
Quantity = Fill until oil reaches full mark on dipstick.



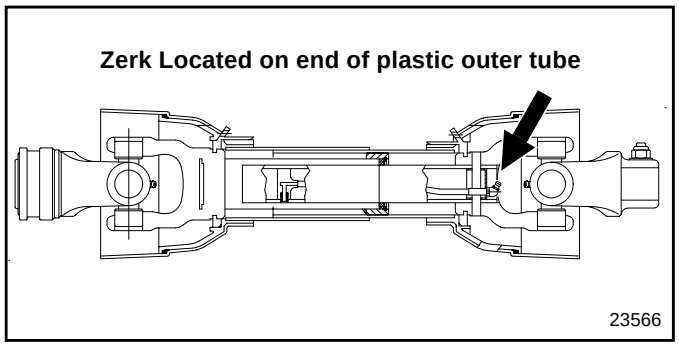


Intermediate Driveline Joints

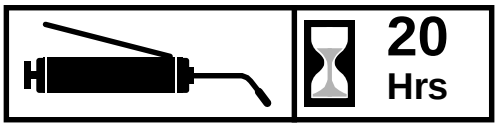
Type of Lubrication: Multi-purpose Grease



Drivelines with external profile tube grease point



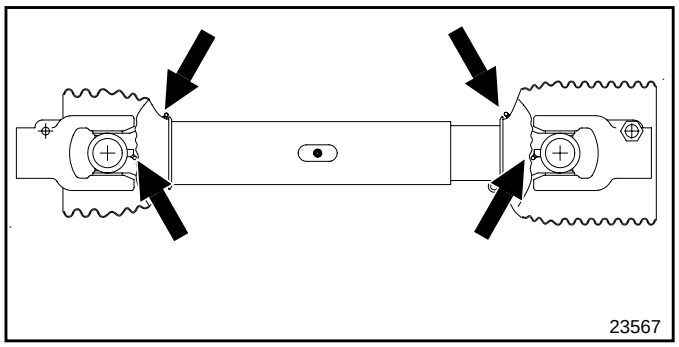
Drivelines with internal profile tube grease point



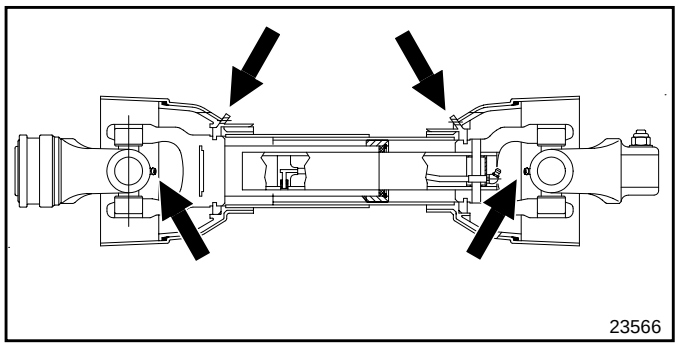
Conventional Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

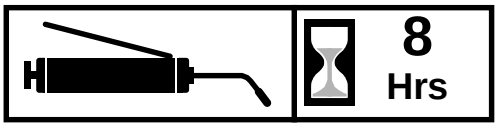
Quantity = Coat Generously



Drivelines with external profile tube grease point

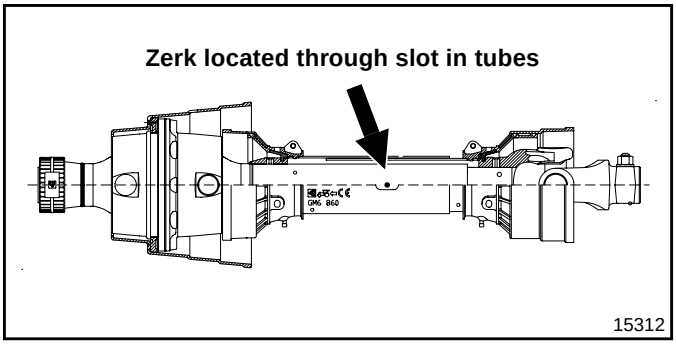


Drivelines with internal profile tube grease point

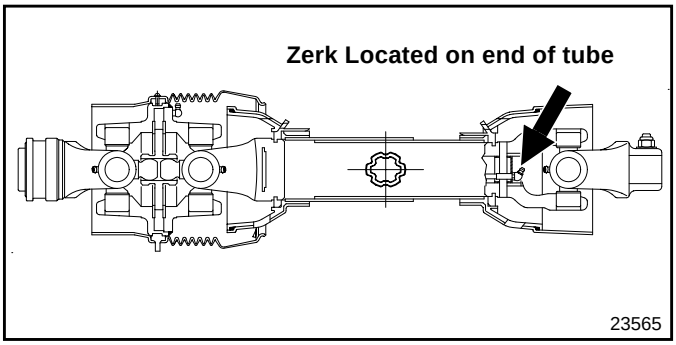


Conventional Driveline Joints & Shields

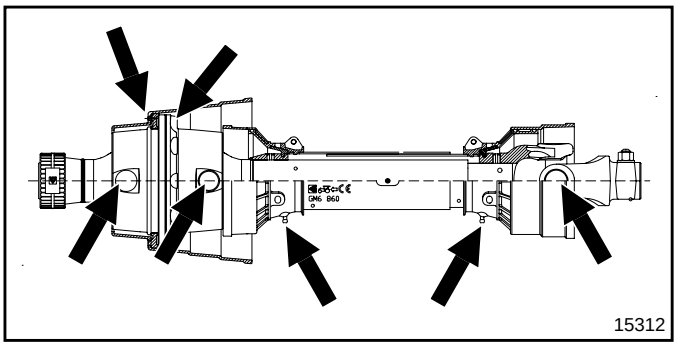
Type of Lubrication: Multi-purpose Grease



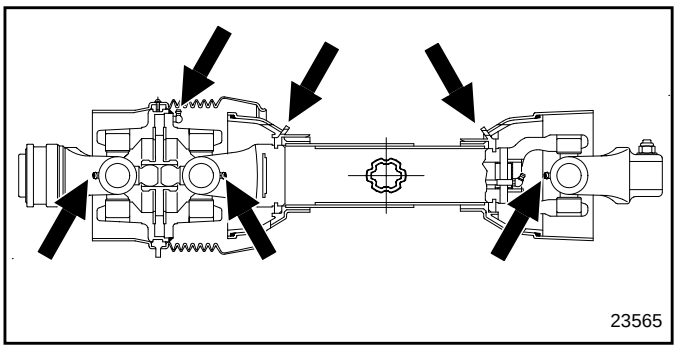
Drivelines with external tube grease point



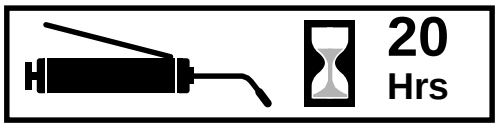
Drivelines with internal tube grease point



Drivelines with external tube grease point



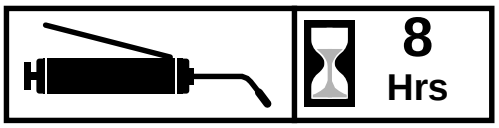
Drivelines with internal tube grease point



Constant Velocity Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

Quantity = Coat Generously

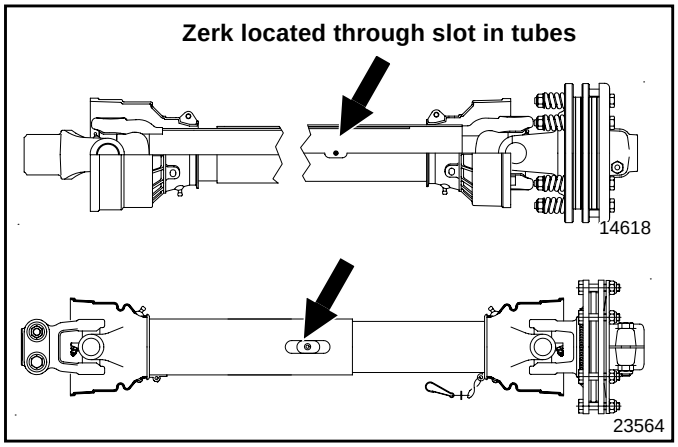


Constant Velocity Driveline Joints & Shields

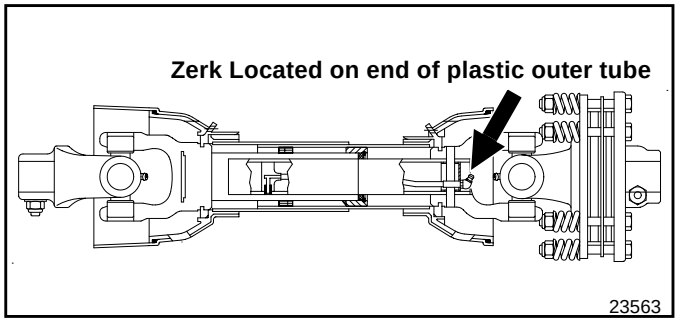
Type of Lubrication: Multi-purpose Grease

NOTE: To extend the life of the constant velocity joint, extensive lubrication must be performed every 8 hours of operation.

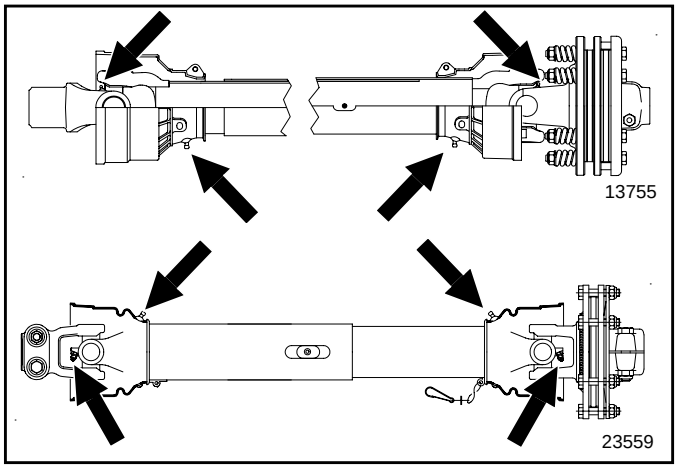
- The constant velocity joint should be greased in a straight position forcing grease through the passages and into the cavity. After lubrication, grease should be visible around the ball joints.
- The constant velocity driveline comes equipped with a grease zerk in the outer telescoping member and must be greased every 8 hours to prevent premature failure of the joint.
- Grease fittings are located on the u-joints and driveline shields and should be lubricated every 8 hours of operation.



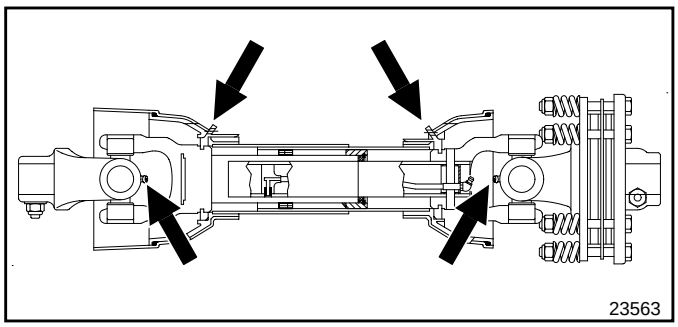
Drivelines with external tube grease point



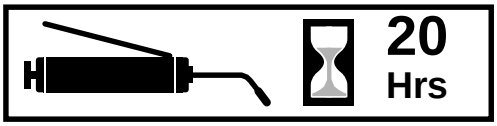
Drivelines with internal profile tube grease point



Drivelines with external profile tube grease point



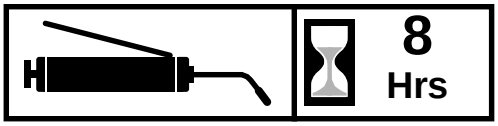
Drivelines with internal profile tube grease point



Wing Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

Quantity = Coat Generously



Wing Driveline Joints & Shields

Type of Lubrication: Multi-purpose Grease

RC5010, RCM5010, RC6010 & RCM6010 Series

	RC5010 & RCM5010	RC6010 & RCM6010
Cutting Width **Overall Width** **Minimum Transport Width**	10’-0” 11’-0” 8’-0”	10’-0” 11’-0” 8’-0”
Cutting Height	2” - 14”	
Overall Length	15’-1"	
Deck Material Thickness	10 gauge	3/16”
Deck Rings	Optional	
Deck Height	10 1/2”	
Hitch Type	Pull Type, Self - Leveling Hitch & Clevis	
Hitch Options	Standard Clevis, Double Swivel or Bar-Tite	
Blades - 4(2 per Carrier)	1/2” x 4” Heat Treated Alloy Steel Free Swinging with up lift	
Blade Tip Speed @ 540 RPM **Center Blade** **Wing Blade**	 14,909 FPM 5,307 FPM	 15,268 FPM 15,000 FPM
Blade Tip Speed @ 1000 RPM **Center Blade** **Wing Blade**	 15,606 FPM 14,651 FPM	 15,578 FPM 14,620 FPM
Blade Holders	Wing & Center: 3/16”, Round, Dish Shaped	
Debris Guards	Rubber, Single or Double Chain	
Input Drive Line	540 PTO: ASAE Category 5 1000 PTO:ASAE Category 5	
Connecting Driveline	Cat.4 Slip-Clutch	
Gear Boxes	250 HP	
Wheel Options	6” x 21” Laminated or 15” Rims or 24” x 7.7” x 15” Used Aircraft Tires	
Center Axle Options	Walking Tandem	
Shock Load Suspension	Springs on center axle	
Machine Weight (With front / rear chain guards)	3,417 lbs. Approx.	3,600 lbs. Approx.
Tongue Weight	1,350 lbs.	
Tongue Jack	Standard	
Min. PTO Horse Power	50	

RC5010 & RCM5010 Series

Features	Benefits
250 HP Splitter box	Tough gearbox to handle heavy-duty work.
210 HP wing boxes	Tough gearbox to handle heavy-duty work.
Tractor HP range	50 - 250 HP
Gearbox warranty	S/N 325492+ 5 years on housing, gears and shafts, 3 years on seals & bearings.
2 3/8" Output shaft	Large output shaft handles shock loads better.
Input driveline: Cat. 5	Constant velocity or conventional u-joint available.
540 or 1000 RPM	Fits wide variety of tractors.
Self-leveling clevis type hitch	Reduces drawbar wear by keeping hitch level while going through ditches.
Double swivel hitch (Optional)	Great for uneven terrain, reduces drawbar wear.
Bar-tite hitch (Optional)	Ideal drawbar for extreme conditions. Clamps tight to the drawbar eliminating any drawbar wear
Gearbox seal protection	Gearbox bottom seal is protected for longer bearing life.
10 Gauge deck	Heavy deck design holds up to harsh conditions.
1/4 " Sidewall thickness	Reduces debris piercing possibilities.
10 1/2" Deck height	Handles heavy cutting, which reduces balling up of cut material under the deck.
2" to 14" Cutting Height	Cover a wide range of cutting conditions.
6" Blade overlap	Eliminates skipping during turns.
3" Cutting capacity	Can cut brushy areas with saplings.
High blade tip speed	(540 rpm = 14,909 fpm center & 15,037 fpm wing) (1000 rpm = 15,606 fpm center & 14,651 fpm wing) Allows clean cutting of material.
Replaceable skid shoes	Can be replaced when damaged or worn out on wing and center deck.
3/16" Stump jumper	Heavy round stump jumper with bottom gearbox seal protector. Can hold up to tough conditions.
Deck rings (option)	Keeps blades from damaging the deck.
4 Plate slip-clutch	Protects drivelines and gearboxes by slipping clutches rather than twisting the driveline when impacts are encountered.
Easy to Grease drivelines	Drivelines have access holes to grease the U-joints of the driveline, as well as holes to grease the inner profiles.
Hinged wing section	Allow you to shape the cutter to the job. Ideal for rough ground where hillsides, ditches and hollows can cause uneven cutting.
1" Solid hinge rods	Larger diameter hinge rod gives greater strength to the cutter from front to rear, and in the hinge area itself.
Transport wing locks	Transport wing lock securely holds the wing in the folded position in case of hydraulic failure.
Enclosed front to rear dual leveling rods	Dual leveling rods enable the cutter to pull equally on the rear axle during travel over rough terrain. Some competitors only use one leveling rod.
Airplane tire option with optional foam sealant	Airplane tires give better cushion while transporting the cutter. Available with heavy-duty foam which virtually eliminates flats.
Laminated tires option	Can't go flat.
Replaceable wheel spindles	Wheel spindles can be replaced easily by removing two bolts vs. replacing the entire axle.
Wheels	5 or 6 Wheel option.
Spring cushioned center-axle	Protects unit from bumps and ground shock.
Walking Tandem (Optional)	Better flotation on rougher terrain.
Surpassed rugged industry standards	All Land Pride Cutters have been designed and tested and meet rigorous voluntary testing procedures specified by ANSI.
Paint Options	Choice of red, green or tan to match popular tractor lines.

RC6010 & RCM6010 Series

Features	Benefits
250 HP Splitter box	Tough gearbox to handle heavy-duty work.
210 HP wing boxes	Tough gearbox to handle heavy-duty work.
Tractor HP range	50 - 250 HP
Gearbox warranty	S/N 325492+ 5 years on housing, gears and shafts, 3 years on seals & bearings.
2 3/8" Output shaft	Large output shaft handles shock loads better.
Input driveline: Cat. 5	Constant velocity or conventional u-joint available.
540 or 1000 RPM	Fits wide variety of tractors.
Self-leveling clevis type hitch	Reduces drawbar wear by keeping hitch level while going through ditches.
Double swivel hitch (Optional)	Great for uneven terrain, reduces drawbar wear.
Bar-tite hitch (Optional)	Ideal drawbar for extreme conditions. Clamps tight to the drawbar eliminating any drawbar wear
Gearbox seal protection	Gearbox bottom seal is protected for longer bearing life.
10 Gauge deck	Heavy deck design holds up to harsh conditions.
1/4 " Sidewall thickness	Reduces debris piercing possibilities.
10 1/2" Deck height	Handles heavy cutting, which reduces balling up of cut material under the deck.
2" to 14" Cutting Height	Cover a wide range of cutting conditions.
6" Blade overlap	Eliminates skipping during turns.
3" Cutting capacity	Can cut brushy areas with saplings.
High blade tip speed	(540 rpm = 14,909 fpm center & 15,037 fpm wing) (1000 rpm = 15,606 fpm center & 14,651 fpm wing) Allows clean cutting of material.
Replaceable skid shoes	Can be replaced when damaged or worn out on wing and center deck.
3/16" Stump jumper	Heavy round stump jumper with bottom gearbox seal protector. Can hold up to tough conditions.
Deck rings (option)	Keeps blades from damaging the deck.
4 Plate slip-clutch	Protects drivelines and gearboxes by slipping clutches rather than twisting the driveline when impacts are encountered.
Easy to Grease drivelines	Drivelines have access holes to grease the U-joints of the driveline, as well as holes to grease the inner profiles.
Hinged wing section	Allow you to shape the cutter to the job. Ideal for rough ground where hillsides, ditches and hollows can cause uneven cutting.
1" Solid hinge rods	Larger diameter hinge rod gives greater strength to the cutter from front to rear, and in the hinge area itself.
Transport wing locks	Transport wing lock securely holds the wing in the folded position in case of hydraulic failure.
Enclosed front to rear dual leveling rods	Dual leveling rods enable the cutter to pull equally on the rear axle during travel over rough terrain. Some competitors only use one leveling rod.
Airplane tire option with optional foam sealant	Airplane tires give better cushion while transporting the cutter. Available with heavy-duty foam which virtually eliminates flats.
Laminated tires option	Can't go flat.
Replaceable wheel spindles	Wheel spindles can be replaced easily by removing two bolts vs. replacing the entire axle.
Wheels	5 or 6 Wheel option.
Spring cushioned center-axle	Protects unit from bumps and ground shock.
Walking Tandem (Optional)	Better flotation on rougher terrain.
Surpassed rugged industry standards	All Land Pride Cutters have been designed and tested and meet rigorous voluntary testing procedures specified by ANSI.
Paint Options	Choice of red, green or tan to match popular tractor lines.

Problem	Solution
Oil seal leaking	Drain to level fill hole
	Replace seals
	Clean off wrapped material and check seal areas daily
Power Take Off yoke or shock cross failing	Avoid hitting solid objects
	Lubricate every 8 hours
Slip Clutches slip even with a light load	Replace clutch plates
	Remove foreign object
Bent Power Take Off shaft (Note: Power Take Off shaft should be repaired or replaced if bent)	Reduce lift height in transport position
	Reposition drawbar
	Shorten Power Take Off shaft
Power Take Off shaft telescoping tube failing	Avoid hitting solid objects
Power Take Off shaft telescoping tube wearing	Lubricate every 20 hours of operation
Blades wearing excessively	Raise cutting height
Blades coming loose	Tighten blade hardware, refer to *Service Cutting Blades* in the **"Maintenance and Lubrication"** section starting on page 25.
Blades breaking	Avoid solid objects
Loose blade carrier	Replace gearbox bearings and / or shaft
	Tighten shaft nut to specified torque
Blade carrier bent	Avoid hitting solid objects
Excessive side skid wear	Adjust cutter height
	Raise cutting height
Excessive vibration	Replace Power Take Off or distribution shaft
	Replace blade carrier
	Replace blade
	Inspect and unlock blades
	Disassemble and inspect for incorrectly located needles or damaged bearing cap
	Replace each pair of blades on affected carrier
Wing cylinder movement too slow	Remove elbow fitting and remove orifice

Torque Values Chart

Bolt Size (Inches)	Bolt Head Identification: Grade 2		Grade 5		Grade 8	
in-tpi [1]	N·m [2]	ft-lb [3]	N·m	ft-lb	N·m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12
1/4" - 28	8.5	6	13	10	18	14
5/16" - 18	15	11	24	17	33	25
5/16" - 24	17	13	26	19	37	27
3/8" - 16	27	20	42	31	59	44
3/8" - 24	31	22	47	35	67	49
7/16" - 14	43	32	67	49	95	70
7/16" - 20	49	36	75	55	105	78
1/2" - 13	66	49	105	76	145	105
1/2" - 20	75	55	115	85	165	120
9/16" - 12	95	70	150	110	210	155
9/16" - 18	105	79	165	120	235	170
5/8" - 11	130	97	205	150	285	210
5/8" - 18	150	110	230	170	325	240
3/4" - 10	235	170	360	265	510	375
3/4" - 16	260	190	405	295	570	420
7/8" - 9	225	165	585	430	820	605
7/8" - 14	250	185	640	475	905	670
1" - 8	340	250	875	645	1230	910
1" - 12	370	275	955	705	1350	995
1-1/8" - 7	480	355	1080	795	1750	1290
1 1/8" - 12	540	395	1210	890	1960	1440
1 1/4" - 7	680	500	1520	1120	2460	1820
1 1/4" - 12	750	555	1680	1240	2730	2010
1 3/8" - 6	890	655	1990	1470	3230	2380
1 3/8" - 12	1010	745	2270	1670	3680	2710
1 1/2" - 6	1180	870	2640	1950	4290	3160
1 1/2" - 12	1330	980	2970	2190	4820	3560

Bolt Size (Metric)	Bolt Head Identification: 5.8 Class 5.8		8.8 Class 8.8		10.9 Class 10.9	
mm x pitch	N·m	ft-lb	N·m	ft-lb	N·m	ft-lb
M 5 X 0.8	4	3	6	5	9	7
M 6 X 1	7	5	11	8	15	11
M 8 X 1.25	17	12	26	19	36	27
M 8 X 1	18	13	28	21	39	29
M10 X 1.5	33	24	52	39	72	53
M10 X 0.75	39	29	61	45	85	62
M12 X 1.75	58	42	91	67	125	93
M12 X 1.5	60	44	95	70	130	97
M12 X 1	90	66	105	77	145	105
M14 X 2	92	68	145	105	200	150
M14 X 1.5	99	73	155	115	l215	160
M16 X 2	145	105	225	165	315	230
M16 X 1.5	155	115	240	180	335	245
M18 X 2.5	195	145	310	230	405	300
M18 X 1.5	220	165	350	260	485	355
M20 X 2.5	280	205	440	325	610	450
M20 X 1.5	310	230	650	480	900	665
M24 X 3	480	355	760	560	1050	780
M24 X 2	525	390	830	610	1150	845
M30 X 3.5	960	705	1510	1120	2100	1550
M30 X 2	1060	785	1680	1240	2320	1710
M36 X 3.5	1730	1270	2650	1950	3660	2700
M36 X 2	1880	1380	2960	2190	4100	3220

[1] in-tpi = nominal thread diameter in inches-threads per inch

[2] N· m = newton-meters

[3] ft-lb= foot pounds

[4] mm x pitch = nominal thread diameter in millimeters x thread pitch

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

Additional Torque Values

Blade Bolt Lock Nut	450 ft-lbs.
Blade Carrier Hub Nut	550 ft-lbs. minimum
Wheel Lug Nuts	85 ft-lbs.

Tire Inflation Chart

Tire Size	Inflation PSI
24" x 7.7" 2 PIECE	40

Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Drivelines: One year Parts and Labor
Gearbox:
(S/N 325492+) Five years on Parts & Labor.
(S/N 325491-) Five years on housing, gears, and shaft.
One year on seals and bearings.
Hydraulic Cylinder: One year Parts and Labor
Hoses and seals considered wear items
Blades, Tires, and Driveline Friction Discs: Considered wear items.

This Warranty is limited to the replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Land Pride dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of purchase by the end user.

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